

IDEA
Assignment Guide and Solutions Manual
Created for Forensic Accounting and Fraud Examination

This assignment assumes that the instructor and students have downloaded and opened the student version of IDEA.

As of the time of this writing, the web address of the IDEA Academic Partnership is the follow:

<https://www.casewareanalytics.com/idea-academic-partnership>

The screenshot shows the CaseWare Analytics website. At the top right, there are links for 'customer support', 'IDEA app store', and 'blog', along with 'REQUEST DEMO' and 'CONTACT US' buttons. The CaseWare Analytics logo is on the left. A search bar with 'Enter Keyword...' and a magnifying glass icon is next to a language dropdown menu set to 'English'. Below the navigation bar, the breadcrumb trail reads 'Home > Resources > IDEA Academic Partnership'. The main content area features a blue banner with the text 'IDEA Academic Partnership'. To the left of the banner is a 'Resources' sidebar with buttons for 'Blog', 'Whitepapers', and 'Events'. Below the banner, a paragraph of text reads: 'As post-secondary institutions have to compete harder than ever for top students, it's vital that they offer the most valuable courses, training and skills development possible. For students planning to become auditors, accountants and other financial professionals, gaining hands-on experience in using data analytics provides them a highly competitive advantage when it comes time to job search.'

Professors interested in incorporating IDEA into the classroom would locate this information and contact IDEA directly.

Case background. The overall objective of the following assignments is to complete a forensic accounting / fraud examination of the payroll records related to contractors for the period January 1, 2018 through June 30, 2019. Fairmont Legal Services provides “temporary labor” services to support in-house legal council. Lawyers, employed by Fairmont, are located in the United States, Canada, England and Germany. The company started in 2017.

Fairmont Legal Services has the following accounting and payroll personnel.

- The accounting controller is Jennifer Gally and she manages the payroll master file.
- The payroll manager is Christine Alexander.
- Ms. Alexander gets payroll assistance from a general accounting clerk, Mary Perez. Ms. Perez manages the general ledger and complete almost all reconciliations.
- The accounting department has one other general accountant with no payroll duties, responsibilities nor authority, Carrie Rutten. Ms. Rutten is primarily in charge of the accounts payable, including disbursements, and accounts receivables, including collections, and well as involvement in the monthly general ledger closing and financial statement preparation.

Each week or upon completion of an assignment for a client, the contract laborers (attorneys) are paid; some some payroll disbursements are made during weekdays other than Fridays. Legal service employees who claim 80 or more hours for a payroll period require the approval of the controller prior to payment. The attorneys are treated as employees and their payroll check can be cut on any day of the week, except Saturday and Sunday. To ensure adequate supervision, review and approval of payroll processing and disbursement, Fairmont strictly requires that payroll processing occur only on Monday-Friday. FICA (social security) and Medicare are withheld from employee paychecks. The company also enrolls all employees in a 401K retirement plan. Employees can contribute up to 6% of their salary. Since company inception, only one attorney has terminated, Theresa Angelina. Ms. Theresa was one of Fairmont’s first employees and a former long-time roommate of the payroll manager.

The company also incurs payroll related (company) expenses in terms of FICA (6.2%), Medicare (1.45%) and a 6% contribution to the 401K plan (whether the employee contributes or not).

Rates paid to attorney employees range from \$65 per hour to a maximum of \$125 per hour with pay rates of \$65, \$80, \$100 or \$125 per hour. Client mark-up is 127.3%, including employer benefit costs.

As an example, a \$65 hourly rate, plus employee expenses of 13.65 % for FICA – 6.2%, Medicare – 1.45% and 401K – 6% is a total cost to Fairmont of \$73.87; the client is charged \$147.74; thus, the mark-up on the base rate of \$65 is 127.3% ($147.74 / 65 = 2.273$ minus 1 = 1.273 or 127.3%).

The company runs two payrolls, one for attorney employees who provide labor services to clients. All administrative personnel, including accounting personnel are paid as part of the administrative payroll. When payroll is disbursed, each disbursement has an ordered unique identifier called “Record.”

Known related parties: Christine Alexander has a sister who works for Fairmont as a contract lawyer, Helene Earls. Ms. Earls resides in Germany.

An examination of client profitability indicates that all clients have been billed with the appropriate mark-up. This analysis was completed on each client. Recently, two clients have complained that the costs of their services are over-budget: clients 10002 and 10008. These complaints are being handled by

the sales manager and CEO and the clients seem to be very satisfied with the quality of services provided.

Assignment and Skill Summary

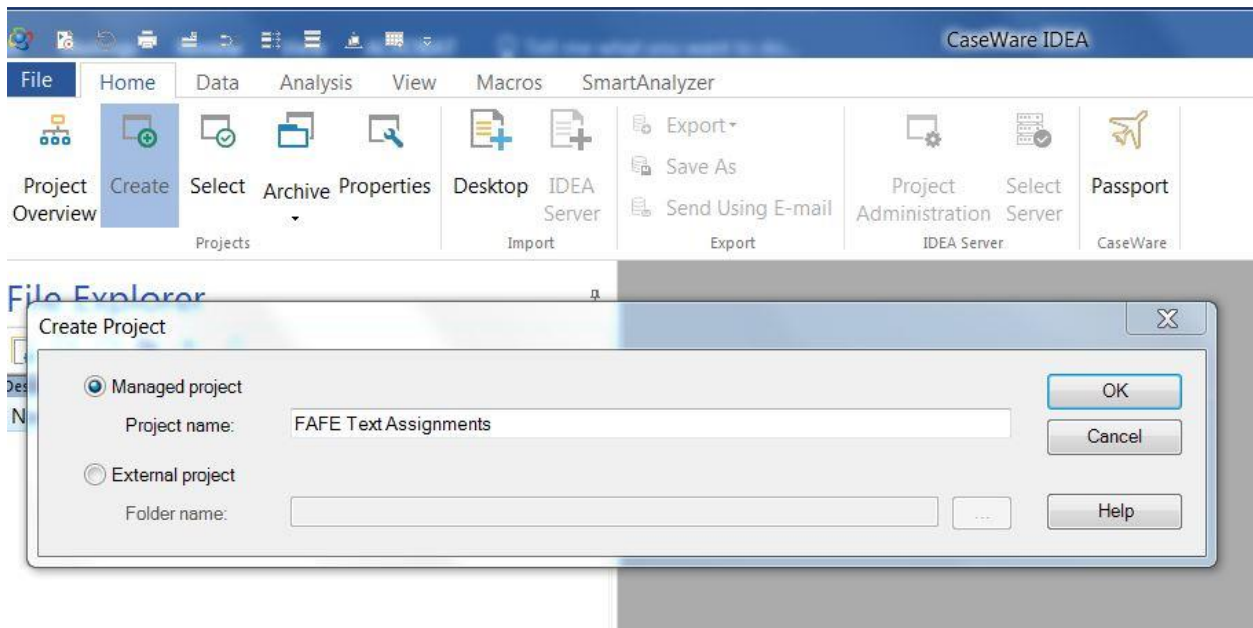
Number	Description	IDEA Skills
1	Importing data and ensuring that the file imports correctly	Creating a Project Import a File
2	Do any accounting or payroll personnel or related parties appear on the contractor payroll?	Summarizing Data Export a File
3	Is Fairmont in compliance with Federal withholding requirements for FICA and Medicare?	Extract: Direct Equation Editor Export a File
4	Is Fairmont in compliance with company policy that requires explicit approval of 80 hours or more?	Extract: Direct Equation Editor Sorting Data (column)
5	Does Fairmont have any duplicate payroll records?	Duplicate Key
6	Does Fairmont have any payroll processing on the weekends?	Field Statistics Using hyper-links
7	Does Fairmont have any contactor personnel whose are being paid but are not on the payroll master file?	Import a File Sorting Using Data-Sort Join
8	Does Fairmont have any contactor personnel whose have terminated but are being paid through payroll (e.g., ghost employee)?	Sorting Data (column) Extract: Key Value
9	Does Fairmont have any personnel whose last name is similar?	Summarization Fuzzy Match Using hyper-links
10	Is Fairmont in compliance with their payroll rates schedule: \$65, \$80, \$100 and \$125?	Summarization
11	Does the Fairmont payroll system's company expense file match to its payroll disbursements file?	Import a File Join
12	Does the payroll disbursements file being analyzed appear to have all of the payroll records disbursed during the period 1/3/2018 to June 28, 2019?	Gap Detection
13	The HR (human resources) department would like to identify all employees who are not withholding the maximum savings amount for the 401K retirement plan of 6%.	Virtual Data Equation Editor Extract: Direct Field Statistics
14	Do the payroll hours comply with Benford's Law?	Benford's Law
15	Summarize forensic accounting concerns that require follow-up examination	n/a
16	Write a report	n/a

Assignment 1

Creating a Project and Importing a File

The first step is to create a project.

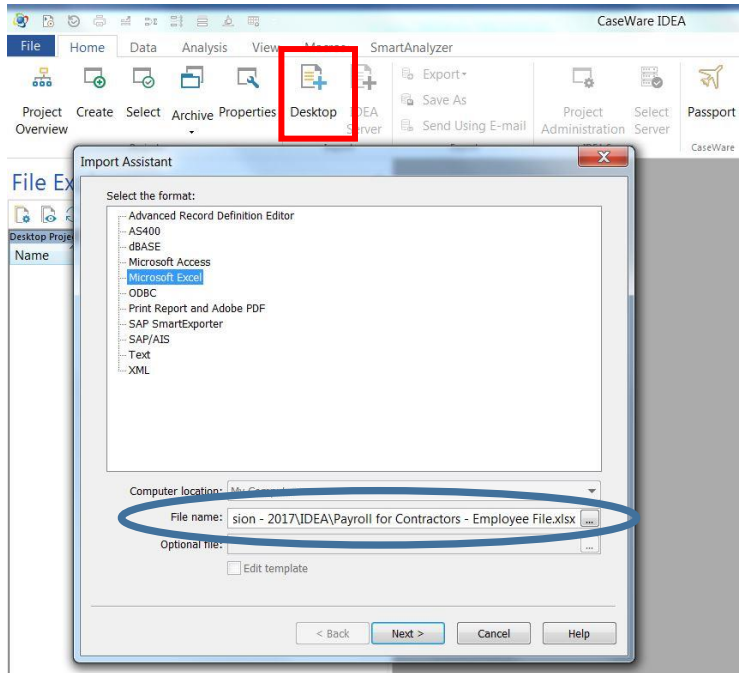
1. Open IDEA
2. Click on “Create”
3. Type in the name of the project. For the assignments associated with this text, we have selected “FAFE Text Assignments” for the project name.
4. Click “OK”



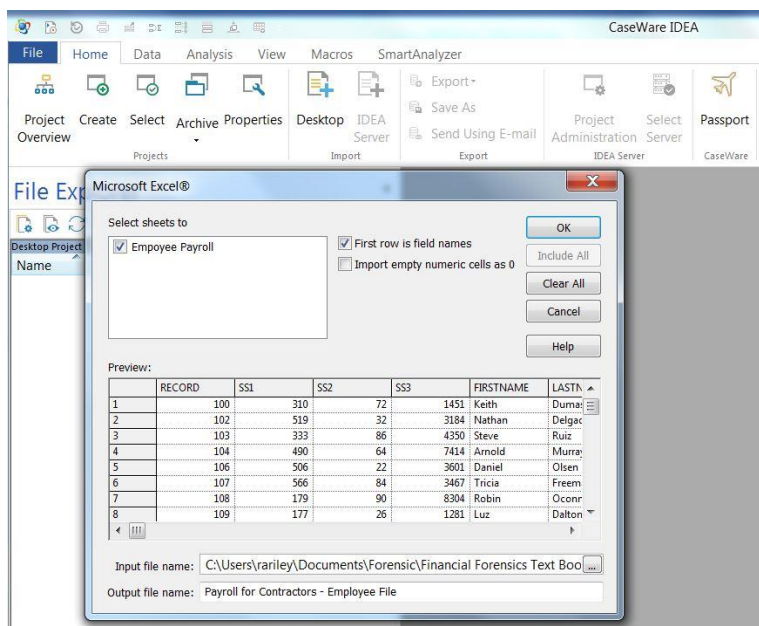
The second step is to import data.

First, import the Excel Payroll File

1. Click on “Desktop” (red box).
2. Click on “Microsoft Excel” and locate the file “Payroll for Contractors – Employee File” in the File Name area (blue oval)



3. Click on “first row is field names” box
4. Click on “Next”
5. Click “OK”

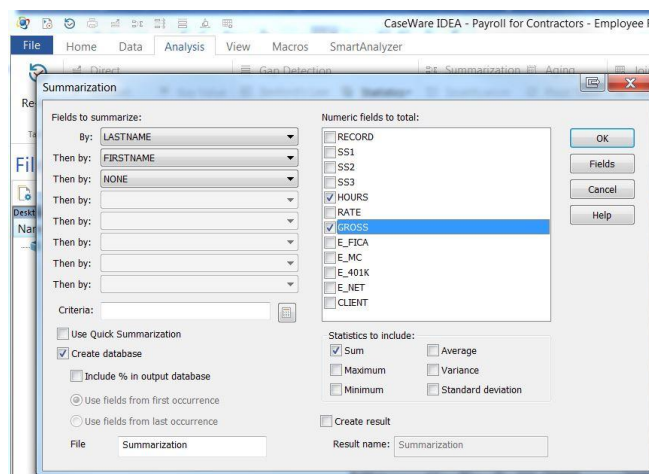


The file should have 986 records. (The importance of ensuring that data imports are complete cannot be over-emphasized).

Assignment 2

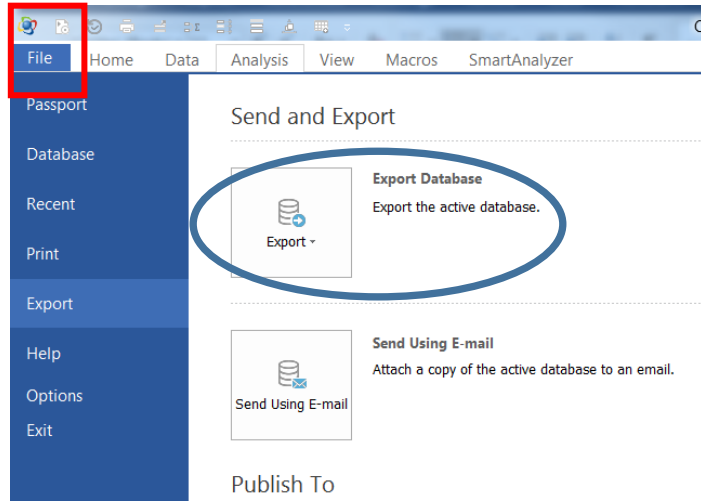
Question. Do any accounting or payroll personnel or related parties appear on the contractor payroll?

1. Click on the “Analysis” tab
2. Click on “summarization” in the “categorize” box
3. Set the “Fields to Summarize” to “LastName”
4. Set “Then by” to “FirstName”
5. Click on (i.e., check) “Hours” and “Gross” boxes in the “Numeric fields to total”
6. Click “OK”



Export the Results to Excel

1. Choose the “File” tab (red box)
2. Select “Export” (blue oval)
3. Select “Microsoft Excel 2007-2010” and set up the location to save using the “File Name” browse feature to set up a location and name the file
4. Click “Save”
5. Click “OK”



Student Task: Students should (a) present a listing of any accounting or payroll personnel who are being inappropriately paid through the contractor (attorney) payroll system and/or any related parties who might need additional examination scrutiny and (b) discuss the findings and recommend investigative next steps.

The results (solution):

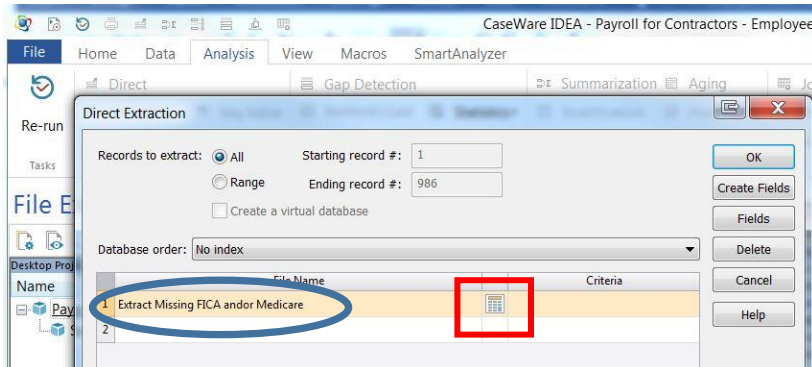
	A	B	C	D	E	F
1	LASTNAME	FIRSTNAME	NO_OF_RECS	HOURS_SUM	GROSS_SUM	
2	Alexander	Christine	20	1,147.00	134,075.00	
3	Rutten	Carrie	12	758.60	78,661.00	
4						
5	Related Party					
6	Earls	Helene	17	1,841.00	195,110.00	
7						
8						

Recall that the case background indicates that administration personnel should not be paid through the payroll system for contract labor. Yet, the payroll manager, Christine Alexander, and general accountant, Carrie Rutten, both have payroll dollars. Alexander is the 3rd highest paid “attorney”, though she is not an attorney. These should be considered a red flags and investigated. Helene Earls is a related party and is the 2nd highest paid attorney. Her payroll should be carefully scrutinized, though she is an attorney engaged to complete work for clients.

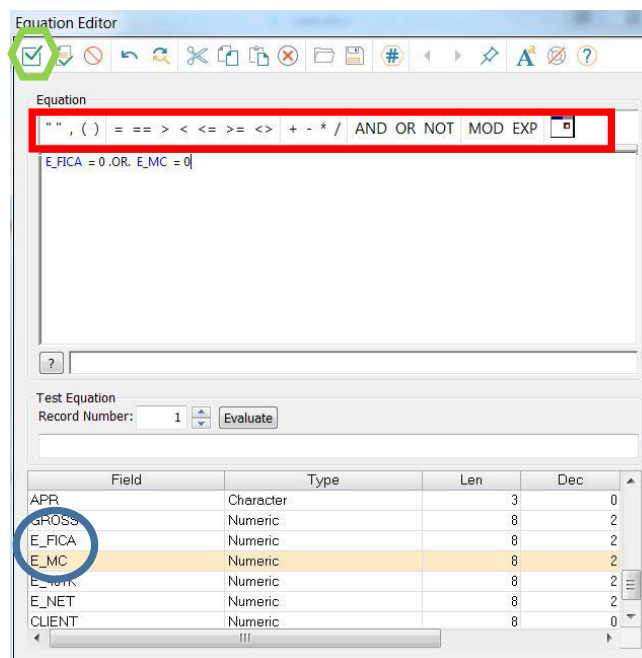
Assignment 3

Question. Is Fairmont in compliance with Federal withholding requirements for FICA and Medicare?

1. Select the "Payroll for Contactors" data tab
2. Select "Analysis"
3. Select "Direct" located in the "Extract" box
4. Double-click on the "File Name" box and type Extract Missing FICA andor Medicare (Blue oval)
5. Click on the "equation editor" (Red Box)



6. Select the data name "E-FICA" (blue oval)
7. Click on "=" sign (red square)
8. Type "0"
9. Click on "OR" (red square)
10. Select the data name "E-MC" (blue oval)
11. Click on "=" sign (red square)
12. Type "0"
13. Click on the checkmark (green hexagon)



14. Click “OK”
15. Export the results as completed in the last assignment.

Student Task: Students should (a) present a listing of any payroll disbursements for which social security and Medicare are not being withheld and (b) discuss the finding and recommend investigative next steps.

The results (solution):

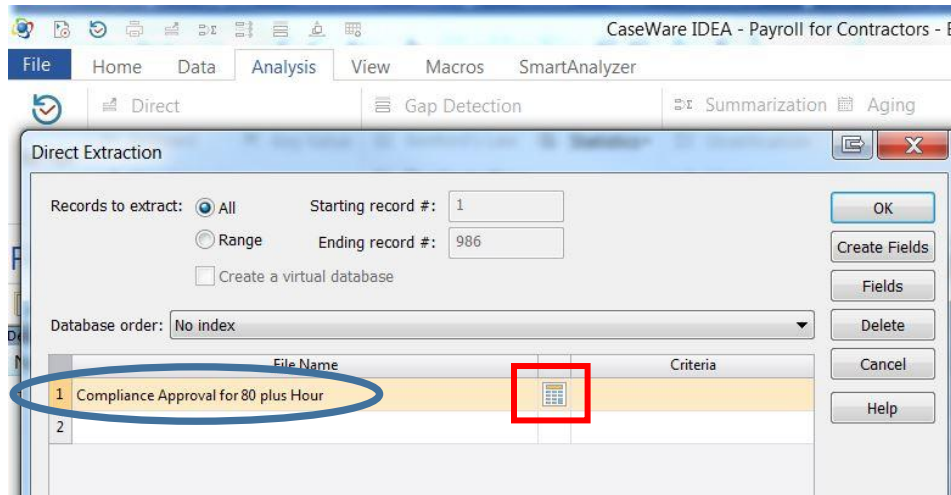
RECORD	FIRSTNAME	LASTNAME	MI	CITY	STATE	DATE	HOURS	RATE	APR	GROSS	E_FICA	E_MC	E_401K	E_NET	CLIENT
717	Theresa	Angelina	.	Mountain City	WV	11/19/2018	12.60	65	n/a	819.00	0.00	0.00	49.14	769.86	10002
718	Luz	Dalton	R.	New Bedford	MA	11/19/2018	13.50	125	n/a	1687.50	0.00	0.00	16.88	1670.62	10002
719	Helene	Earls	J.	Aachen	Germany	11/19/2018	110.00	125		13750.00	0.00	0.00	825.00	12925.00	10002
720	Christine	Alexander	T.	Woodland Hills	CA	11/23/2018	78.00	125	n/a	9750.00	0.00	0.00	585.00	9165.00	10002
722	Nathan	Delgado	B.	Downers Grove	IL	11/23/2018	74.10	100	n/a	7410.00	0.00	0.00	0.00	7410.00	10009
723	Keith	Dumas	V.	Melbourne	FL	11/23/2018	80.50	100	OK	8050.00	0.00	0.00	483.00	7567.00	10008
724	Antonio	Frank	O.	New York	NY	11/23/2018	88.90	100	OK	8890.00	0.00	0.00	533.40	8356.60	10005
725	Michelle	Frazier	N.	Labelle	FL	11/23/2018	45.30	100	n/a	4530.00	0.00	0.00	271.80	4258.20	10002
726	Martin	Kaufman	M.	Sunnyvale	CA	11/23/2018	37.50	125	n/a	4687.50	0.00	0.00	281.25	4406.25	10005
727	Annie	Muniz	I.	Cambridge	United Kingdom	11/23/2018	73.00	125	n/a	9125.00	0.00	0.00	547.50	8577.50	10009
728	Charlie	Newton	E.	London	United Kingdom	11/23/2018	56.80	65	n/a	3692.00	0.00	0.00	221.52	3470.48	10012
729	Marie	Quinn	D.	New York	NY	11/23/2018	78.10	125	n/a	9762.50	0.00	0.00	585.75	9176.75	10009

The results suggest that Fairmont had 12 records all out of compliance with Federal withholding requirements for FICA and Medicare. There does not appear to be any systematic pattern to the anomaly, except that all were during the one week period November 19 (Monday) through November 23 (Friday) during 2018. The IT department should be contacted and audit logs examined to try to identify the root cause of the anomaly. Once the root cause is identified, Fairmont’s HR, legal and tax support should be consulted to determine next steps to address the issue.

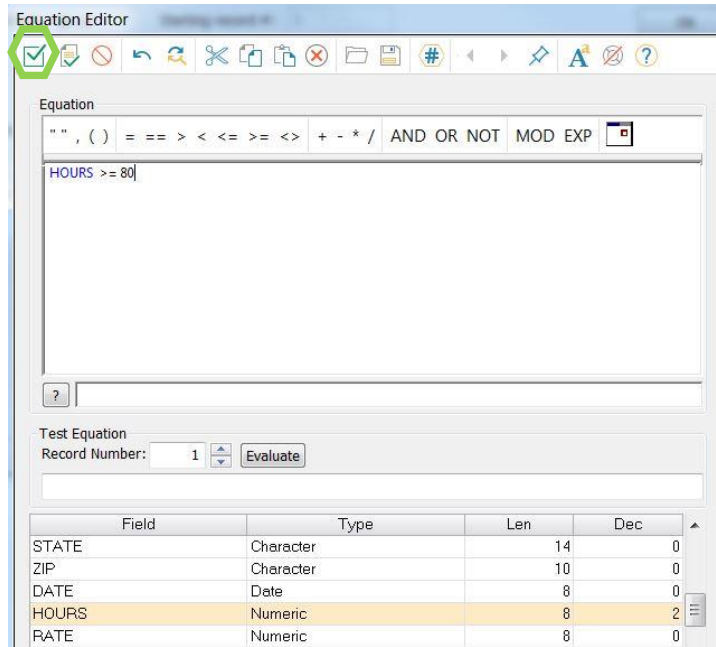
Assignment 4

Question. Is Fairmont in compliance with company policy that requires explicit approval of all hours of 80 hours or more?

1. Select the “Payroll for Contactors” dataset tab
2. Select “Analysis”
3. Select “Direct” located in the “Extract” box
4. Click on the “File Name” box and type “Compliance Approval for 80 plus Hour” (Blue oval)
5. Click on the “equation editor” (Red Box)



6. Select the data name “HOURS”
7. Click on “>=” sign
8. Type “80”
9. Click on the checkmark (green hexagon)
10. Click “OK”



A quick examination of the data suggests non-compliance

	STREET_ADDRESS	CITY	STATE	ZIP	DATE	HOURS	RATE	APR
1	167 John Vertente Boulevard	New Bedford	MA	02745-1221	1/5/2018	86.00	80	OK
2	311 Elm St Ste 1000	Cincinnati	OH	45202-2737	1/5/2018	86.30	100	OK
3	1155 Metcalfe St Suite 800	Montreal, Quebec	CANADA	H3B5H2	1/12/2018	89.80	100	OK
4	18220 Butterfield Blvd	Morgan Hill	CA	95037-2824	1/19/2018	82.70	100	OK
5	1231 Greenway Dr Ste 600	Irving	TX	75038-2511	1/19/2018	88.10	65	OK
6	150 6 Ave SW Suite 3100	Calgary, Alberta	CANADA	T2P 3Y7	1/26/2018	87.20	125	OK
7	333 Butternut Dr	Syracuse	NY	13214-1803	1/26/2018	88.30	100	OK
8	5555 Glenridge Connector NE Ste 300	Atlanta	GA	30342-4741	1/30/2018	84.50	100	OK
9	KackerstraBe 15-17	Aachen	Germany	D-52072	2/2/2018	120.00	65	
10	KackerstraBe 15-17	Aachen	Germany	D-52072	2/7/2018	115.00	100	
11	1400 Opus Pl Ste 600	Downers Grove	IL	60515-5707	2/16/2018	86.00	125	OK
12	7301 S Peoria St	Englewood	CO	80112-4133	2/23/2018	85.30	100	OK
13	PO Box 4569 Stn A	Toronto, Ontario	CANADA	M5W 4T9	2/23/2018	81.80	80	OK
14	KackerstraBe 15-17	Aachen	Germany	D-52072	2/1/2019	110.00	100	
15	830 E Arques Ave	Sunnyvale	CA	94085-4519	3/2/2018	82.40	125	OK
16	KackerstraBe 15-17	Aachen	Germany	D-52072	3/1/2019	120.00	125	
17	2828 N Haskell Ave	Dallas	TX	75204-2988	3/9/2018	89.30	125	OK
18	KackerstraBe 15-17	Aachen	Germany	D-52072	3/8/2019	115.00	125	
19	901 Explorer Blvd NW	Huntsville	AL	35806-2807	3/13/2018	86.70	100	OK
20	2 Marriott Dr	Lincolnshire	IL	60069-3704	3/16/2018	85.50	80	OK
21	KackerstraBe 15-17	Aachen	Germany	D-52072	3/14/2019	99.00	125	
22	18220 Butterfield Blvd	Morgan Hill	CA	95037-2824	3/16/2018	87.10	100	OK
23	150 6 Ave SW Suite 3100	Calgary, Alberta	CANADA	T2P 3Y7	3/21/2018	83.00	65	OK
24	2500 Millbrook Dr	Buffalo Grove	IL	60089-4694	3/23/2018	86.00	125	OK
25	167 John Vertente Boulevard	New Bedford	MA	02745-1221	3/29/2018	87.10	100	OK

Click on the APR column heading to sort.

Student Task: Students should (a) present a listing of any payroll disbursements for which 80 or more hours were paid and approval does not appear in the payroll file and (b) discuss the finding and recommend investigative next steps.

The results (solution):

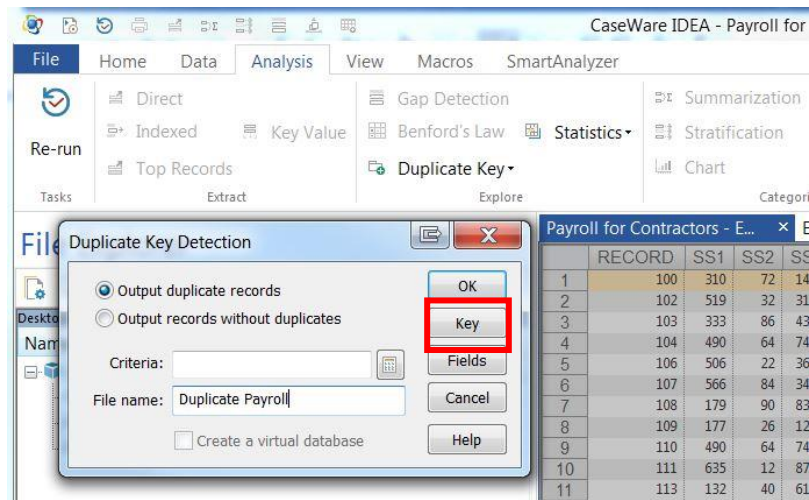
Payroll for Contractors - Employee ... Summarization Extract Missing FICA and/or Medica...									Compliance Approv	
	RECORD	FIRSTNAME	LASTNAME	STATE	ZIP	DATE	HOURS	RATE	APR ▲	GROSS
1	174	Helene	Earls	Germany	D-52072	2/2/2018	120.00	65		7,800.00
2	181	Helene	Earls	Germany	D-52072	2/7/2018	115.00	100		11,500.00
3	685	Helene	Earls	Germany	D-52072	11/2/2018	99.00	125		12,375.00
4	689	Helene	Earls	Germany	D-52072	11/5/2018	99.00	125		12,375.00
5	719	Helene	Earls	Germany	D-52072	11/19/20...	110.00	125		13,750.00
6	834	Helene	Earls	Germany	D-52072	1/18/2019	120.00	100		12,000.00
7	846	Helene	Earls	Germany	D-52072	1/25/2019	99.00	65		6,435.00
8	854	Helene	Earls	Germany	D-52072	2/1/2019	110.00	100		11,000.00
9	869	Helene	Earls	Germany	D-52072	2/8/2019	110.00	100		11,000.00
10	903	Helene	Earls	Germany	D-52072	3/1/2019	120.00	125		15,000.00
11	915	Helene	Earls	Germany	D-52072	3/8/2019	115.00	125		14,375.00
12	920	Helene	Earls	Germany	D-52072	3/14/2019	99.00	125		12,375.00
13	945	Helene	Earls	Germany	D-52072	3/25/2019	100.00	100		10,000.00
14	950	Helene	Earls	Germany	D-52072	3/29/2019	120.00	100		12,000.00
15	1034	Helene	Earls	Germany	D-52072	5/31/2019	105.00	125		13,125.00
16	1045	Helene	Earls	Germany	D-52072	6/7/2019	101.00	100		10,100.00
17	1089	Helene	Earls	Germany	D-52072	6/28/2019	99.00	100		9,900.00
18	105	Robert	Corbett	CA	92121-2924	1/5/2018	86.00	80	OK	6,880.00
19	108	Andrew	Hamilton	PA	18106-9268	1/5/2018	86.30	100	OK	8,630.00

A review of the sorted data suggests that all non-compliance is associated with one contract lawyer, Helen Earls who is related to Christine Alexander, the Payroll Manager. Further, the non-compliance has been charged to one client, client 10002 who has complained about the amount of charges from Fairmont.

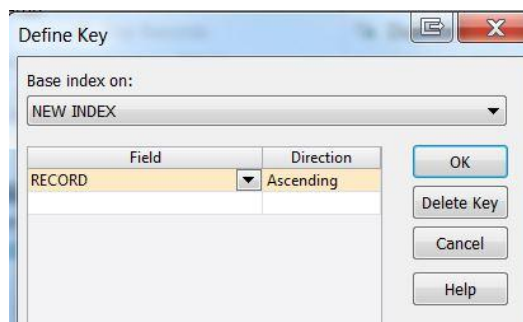
Assignment 5

Question. Does Fairmont have any duplicate payroll records?

1. Select the “Payroll for Contactors” data tab
2. Select “Analysis”
3. Select “Duplicate Key” down-arrow located in the “Explore” box
4. Select “Detection”
5. In the “File Name” box, type “Duplicate Payroll”
6. Click on “Key” (red box)



7. “Record” is the unique identifier for payroll disbursements. It has already been identified in the “Field” box



8. Click “OK”
9. Click “OK”

Student Task: Students should (a) present a listing of any duplicate payroll disbursements and (b) discuss the finding and recommend investigative next steps.

The results (solution):

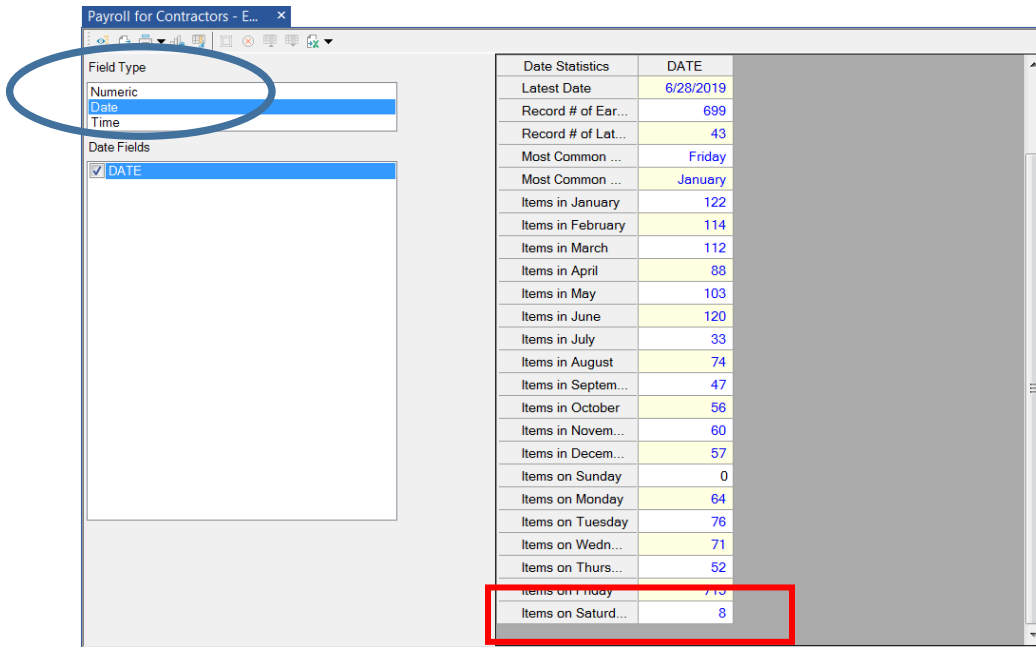
	RECORD	FIRSTNAME	LASTNAME	STATE	DATE	HOURS	APR	GROSS	E_FICA	E_NET	CLIENT
1	161	Carrie	Rutten	IN	1/26/2018	77.70	n/a	5,050.50	313.13	4,361.11	10008
2	161	Carrie	Rutten	IN	1/26/2018	77.70	n/a	5,050.50	313.13	4,361.11	10008
3	216	Carrie	Rutten	IN	2/21/2018	67.70	n/a	6,770.00	419.74	5,845.89	10008
4	216	Carrie	Rutten	IN	2/21/2018	67.70	n/a	6,770.00	419.74	5,845.89	10008
5	427	Carrie	Rutten	IN	6/8/2018	69.10	n/a	6,910.00	428.42	5,966.78	10008
6	427	Carrie	Rutten	IN	6/8/2018	69.10	n/a	6,910.00	428.42	5,966.78	10008
7	803	Carrie	Rutten	IN	1/1/2019	16.10	n/a	2,012.50	124.78	1,737.79	10008
8	803	Carrie	Rutten	IN	1/1/2019	16.10	n/a	2,012.50	124.78	1,737.79	10008
9	822	Carrie	Rutten	IN	1/11/2019	85.20	OK	10,650.00	660.30	9,196.27	10008
10	822	Carrie	Rutten	IN	1/11/2019	85.20	OK	10,650.00	660.30	9,196.27	10008
11	886	Carrie	Rutten	IN	2/15/2019	63.50	n/a	7,937.50	492.13	6,854.03	10008
12	886	Carrie	Rutten	IN	2/15/2019	63.50	n/a	7,937.50	492.13	6,854.03	10008

Duplicate payroll disbursements records were identified for only one administrative employee, Carrie Rutten who should not be paid via the contractor payroll. Further, Ms. Rutten is a general accountant with no payroll duties, responsibilities nor authority. Thus, this anomaly requires further examination. Further, the non-compliance has been charged to one client, client 10008 who has complained about the amount of charges from Fairmont.

Assignment 6

Question. Does Fairmont have any payroll processing on the weekends?

1. Select the “Payroll for Contractors” data tab
2. Under Properties, click on “Field Statistics” (blue oval)
3. Set the “Field Type” to Date (blue oval)
4. Scroll to bottom (red box)



5. Eight (8) payroll items were process on “Saturday”
6. Click on the hyper-link “8”

Student Task: Students should (a) present a listing of any payroll disbursements processed on a weekend (Saturday or Sunday) and (b) discuss the finding and recommend investigative next steps.

The results (solution):

Items on Saturday of DATE																				
RECORD	SS1	SS2	SS3	FIRSTNAME	LASTNAME	MI	STREET_ADDRESS	CITY	STATE	ZIP	DATE	HOURS	RATE	APR	GROSS	E_FICA	E_MC	E_401K	E_NET	CLIENT
1	564	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	8/25/2018	78.00	125	n/a	9,750.00	604.50	141.38	585.00	8,419.12	10002
2	810	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	1/5/2019	75.00	125	n/a	9,375.00	581.25	135.94	562.50	8,095.31	10002
3	928	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	3/16/2019	75.00	125	n/a	9,375.00	581.25	135.94	562.50	8,095.31	10002
4	1017	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	5/18/2019	75.00	125	n/a	9,375.00	581.25	135.94	562.50	8,095.31	10002
5	649	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	10/13/2018	72.00	125	n/a	9,000.00	558.00	130.50	540.00	7,771.50	10002
6	765	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	12/15/2018	71.00	125	n/a	8,875.00	550.25	128.69	532.50	7,663.56	10002
7	730	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	11/24/2018	70.00	125	n/a	8,750.00	542.50	126.88	525.00	7,555.62	10002
8	341	172	98	Christine	Alexander	T.	6301 Owensmouth Ave	Woodland Hills	CA	91367-2286	4/28/2018	30.00	80	n/a	2,400.00	148.80	34.80	144.00	2,072.40	10002

All 8 transactions were payroll processed on behalf of Christine Alexander, Payroll Manager. As an administrative employee, Christine Alexander should not be paid via the contractor payroll. This supplements the finding in assignment 2. Eight of the 20 transactions identified in assignment 2, processed to Christine Alexander, were process on a Saturday in violation of company policy. These should be considered a red flags and investigated. Further, the non-compliance has been charged to one client, client 10002 who has complained about the amount of charges from Fairmont.

Assignment 7

Question. Does Fairmont have any contactor personnel whose are being paid but are not on the payroll master file?

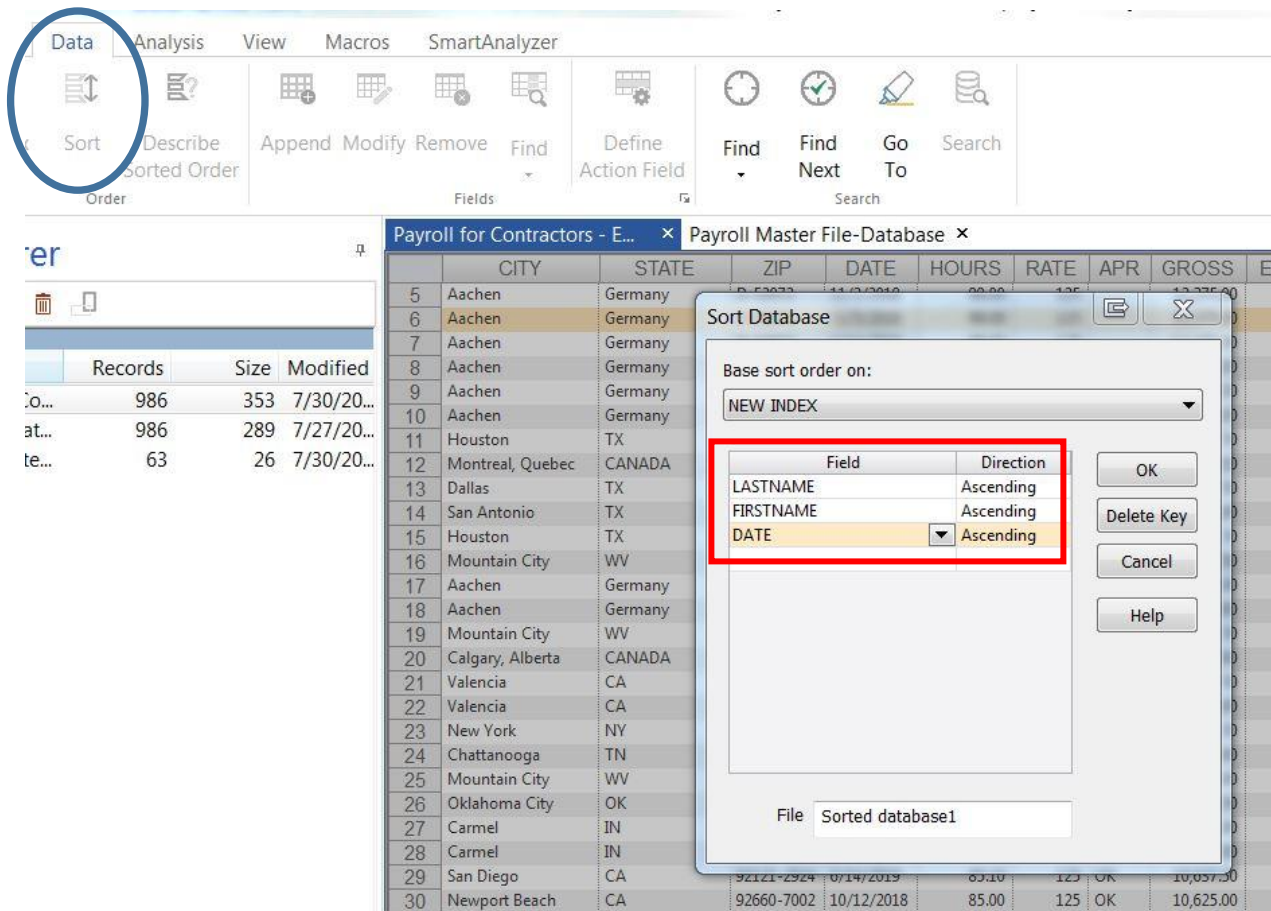
First, import the "Excel Payroll Master File"

1. Click on "Desktop".
2. Click on "Microsoft Excel" and locate the file "Payroll Master File"
3. Click on "first row is field names" box
4. Click on "Next"
5. Click "OK"

Note: The Payroll Master File should have 63 records, including one termination for Theresa Angelina dated January 4, 2019.

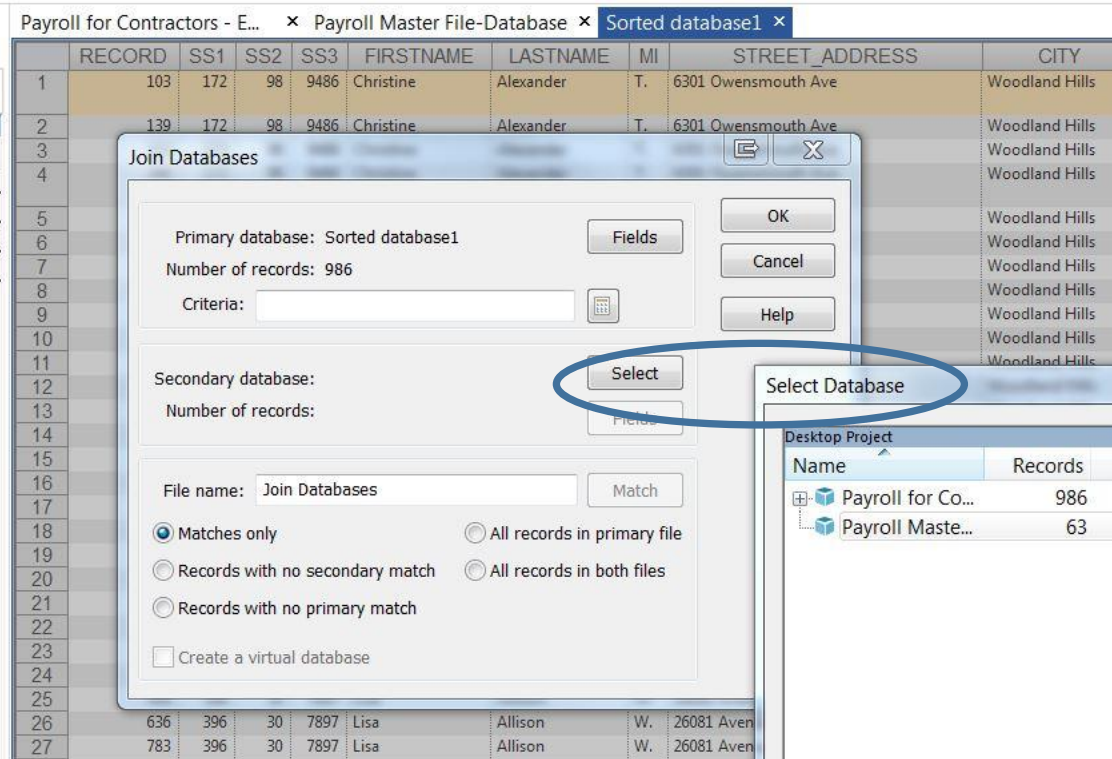
Second, note that the payroll master file is sorted in alphabetical order (last name; first name). For IDEA to join files for analysis, both need to be sorted in the same order.

6. Click on the "Payroll for Contractors" dataset
7. Click on the "Data" tab; then, click on "Sort" (blue circle)
8. In the "Sort Database" box, select (red box):
 - a. LastName (ascending)
 - b. FirstName (ascending)
 - c. Date (ascending)
 - d. Click "OK"

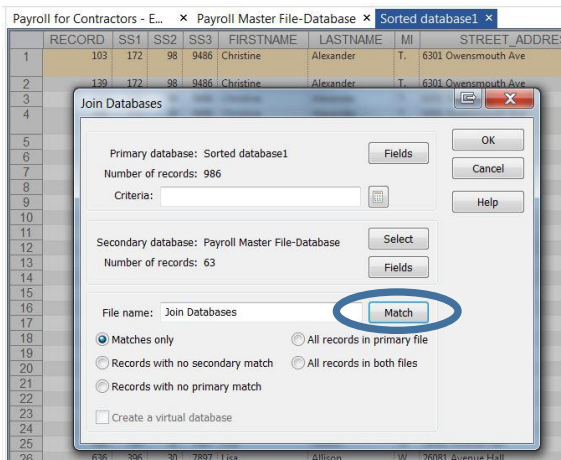


Third, merge (“join”) the payroll disbursements and payroll master files

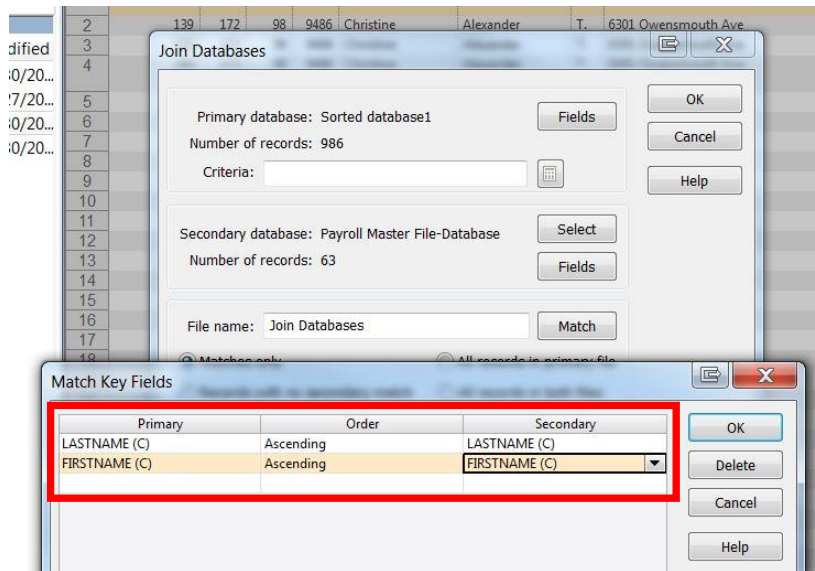
9. Under “Analysis,” click on “Join” from the “Relate” box. Note that the primary database is the SORTED Payroll for Contractors” file (986 records)
10. Click on “Select” to identify the database to join to the SORTED payroll disbursements data.
11. In the “Select Database” box, click on “Payroll Master File” (63 records)
12. Click “OK”



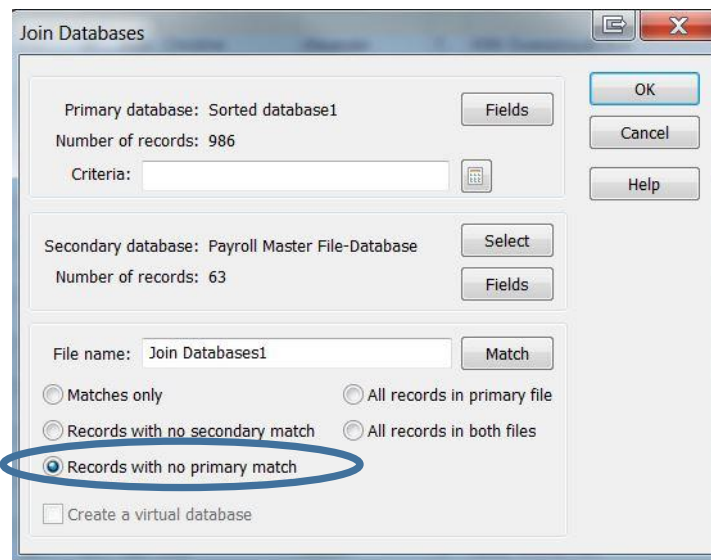
13. Click on “Match” in the “Join Databases” Box (blue oval)



14. In the “Match Key Fields” select “LastName” in the primary and secondary columns and “ascending” in the order column (red box)
15. In the “Match Key Fields” select “FirstName” in the primary and secondary columns and “ascending” in the order column (red box)
16. Click “OK”



17. Select "Records with no primary match" (blue oval)
18. Click "OK"



Student Task: Students should (a) present a listing of any payroll disbursements last are not listed in the payroll master file and (b) discuss the finding and recommend investigative next steps.

The results (solution):

Payroll for Contractors - E... × Payroll Master File-Database × Sorted database1 × Join Databases1 ×

RECORD	SS1	SS2	SS3	FIRSTNAME	LASTNAME	MI	STREET_ADDRESS	CITY	STATE	ZIP	DATE	HOURS	RATE
1	0	0	0								0/0/0000	0.00	0

All persons processed as a payroll disbursement were listed in the payroll Masterfile. However, as noted in prior assignments, several payroll disbursements anomalies were noted, including accounting and payroll personnel being inappropriately paid through the contract services payroll system. This finding

that accounting and payroll personnel have been approved in the payroll master file for attorney contract workers is an anomaly that requires further examination.

Assignment 8

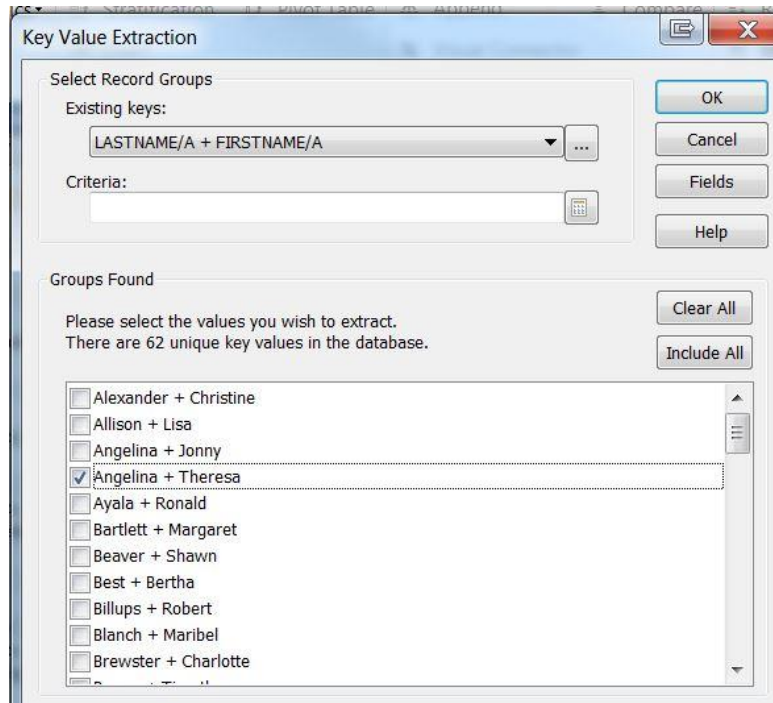
Question: Does Fairmont have any contractor personnel whose have terminated but are being paid through payroll after termination (e.g., ghost employees)?

1. Click on the "Payroll Master File"
2. Click on the "Termination Date" to sort the file by termination dates



	LASTNAME	FIRSTNAME	TERMINATION_DATE
1	Angelina	Theresa	01/04/2019
2	Warner	Laura	
3	Upchurch	Heidi	
4	Thompson	Helen	
5	Sanchez	Victoria	
6	Rutten	Carrie	
7	Ruiz	Steve	
8	Reneau	Delbert	
9	Quinn	Marie	
10	Phillips	James	
11	Perez	Mary	
12	Patrick	Tessa	
13	Olsen	Daniel	
14	Nguyen	Philip	

3. Note: One employee, Theresa Angelina, terminated with the company on January 4, 2019
4. Click on the Payroll for Contractors database
5. Click on "Key Value" in the "Extract" box
6. Click on "Existing Keys" and click on "LastName/A + FirstName/A"
7. Click on "Clear All"
8. Click on "Angelina + Theresa"
9. Click "OK"



10. Click on "File"
11. Click on "Export"
12. Save the file as an "Microsoft Excel 2007-2010" file on your hard drive.
13. Open the Excel file
14. Sort by Date, if necessary
15. Delete payroll disbursements dated prior to 1/4/2019
16. Insert Excel totals (@Sum) at the bottom of the columns

Student Task: Students should (a) present a listing of any payroll disbursements for Theresa Angelina after January 4, 2019 and (b) discuss the finding and recommend investigative next steps.

The results (solution):

RECORD	SS1	SS2	SS3	FIRSTNAM	LASTNAME	MI	DATE	HOURS	RATE	APR	GROSS	E_FICA	E_MC	E_401K	E_NET	CLIENT
812	260	60	1505	Theresa	Angelina	.	1/8/2019	55.00	100	n/a	5,500.00	341.00	79.75	330.00	4,749.25	10009
823	260	60	1505	Theresa	Angelina	.	1/14/2019	18.40	125	n/a	2,300.00	142.60	33.35	138.00	1,986.05	10007
830	260	60	1505	Theresa	Angelina	.	1/18/2019	69.50	125	n/a	8,687.50	538.63	125.97	521.25	7,501.65	10005
890	260	60	1505	Theresa	Angelina	.	2/22/2019	25.40	65	n/a	1,651.00	102.36	23.94	99.06	1,425.64	10005
897	260	60	1505	Theresa	Angelina	.	2/25/2019	72.20	100	n/a	7,220.00	447.64	104.69	433.20	6,234.47	10002
918	260	60	1505	Theresa	Angelina	.	3/13/2019	61.20	100	n/a	6,120.00	379.44	88.74	367.20	5,284.62	10012
956	260	60	1505	Theresa	Angelina	.	4/5/2019	59.30	100	n/a	5,930.00	367.66	85.99	355.80	5,120.55	10001
969	260	60	1505	Theresa	Angelina	.	4/12/2019	73.20	65	n/a	4,758.00	295.00	68.99	285.48	4,108.53	10006
974	260	60	1505	Theresa	Angelina	.	4/16/2019	9.90	100	n/a	990.00	61.38	14.36	59.40	854.86	10001
994	260	60	1505	Theresa	Angelina	.	5/1/2019	7.50	100	n/a	750.00	46.50	10.88	45.00	647.62	10008
1006	260	60	1505	Theresa	Angelina	.	5/13/2019	39.80	65	n/a	2,587.00	160.39	37.51	155.22	2,233.88	10004
1011	260	60	1505	Theresa	Angelina	.	5/17/2019	9.60	100	n/a	960.00	59.52	13.92	57.60	828.96	10008
1024	260	60	1505	Theresa	Angelina	.	5/24/2019	34.50	100	n/a	3,450.00	213.90	50.03	207.00	2,979.07	10001
1030	260	60	1505	Theresa	Angelina	.	5/31/2019	81.80	65	OK	5,317.00	329.65	77.10	319.02	4,591.23	10007
1066	260	60	1505	Theresa	Angelina	.	6/19/2019	42.20	65	n/a	2,743.00	170.07	39.77	164.58	2,368.58	10009
1083	260	60	1505	Theresa	Angelina	.	6/28/2019	12.70	125	n/a	1,587.50	98.43	23.02	95.25	1,370.80	10005
								672.20			60,551.00	3,754.17	878.01	3,633.06	52,285.76	

An investigation needs to be conducted regarding payroll disbursed to Theresa Angelina after her termination date. These expenditures total \$60,551 (plus the company expense).

Note: For the summarization step, rather than exporting, the procedure can be completed inside IDEA using the Direct Extract procedure (under Analysis tab) and using Field Statistics – these procedure were utilized in prior assignments. The resulting outcome is as follows:

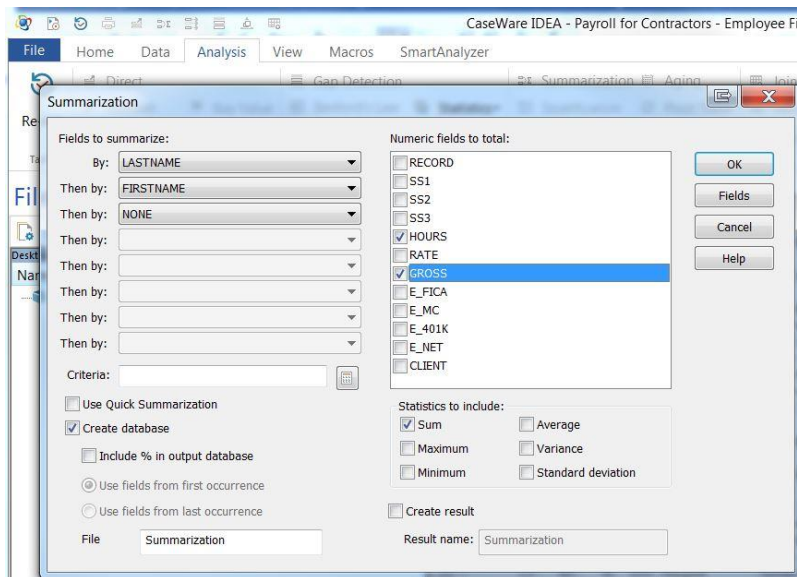
Numeric Statistics	HOURS	GROSS	E_FICA	E_MC	E_401K	E_NET
Net Value	672.20	60,551.00	3,754.17	878.01	3,633.06	52,285.76
Absolute Value	672.20	60,551.00	3,754.17	878.01	3,633.06	52,285.76
# of Records	16	16	16	16	16	16
# of Zero Items	0	0	0	0	0	0
Positive Value	672.20	60,551.00	3,754.17	878.01	3,633.06	52,285.76
Negative Value	0.00	0.00	0.00	0.00	0.00	0.00
# of Positive Re...	16	16	16	16	16	16
# of Negative R...	0	0	0	0	0	0
# of Data Errors	0	0	0	0	0	0
# of Valid Values	16	16	16	16	16	16
Average Value	42.01	3,784.44	234.64	54.88	227.07	3,267.86
Minimum Value	7.50	750.00	46.50	10.88	45.00	647.62
Maximum Value	81.80	8,687.50	538.63	125.97	521.25	7,501.65
Record # of Min	10	10	10	10	10	10
Record # of Max	14	3	3	3	3	3
Sample Std Dev	25.93	2,467.75	153.00	35.78	148.07	2,130.91
Sample Variance	672.35	6,089,813.96	23,409.38	1,280.37	21,923.33	4,540,760.74
Pop Std Dev	25.11	2,389.39	148.14	34.65	143.36	2,063.24
Pop Variance	630.33	5,709,200.59	21,946.29	1,200.35	20,553.12	4,256,963.19
Pop Skewness	0.017275	0.420801	0.420816	0.420838	0.420801	0.420799
Pop Kurtosis	-1.455085	-0.996673	-0.996633	-0.996714	-0.996673	-0.996675

Assignment 9

Question. Does Fairmont have any personnel whose last name is similar?

First, summarize payroll processing by last and first name.

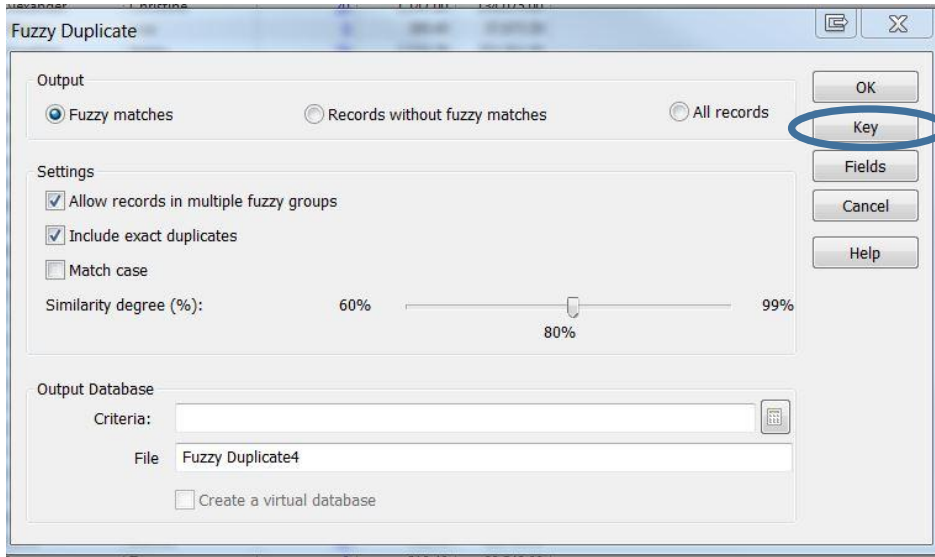
1. Select the “Payroll for Contactors” data tab
2. Select “Analysis”
3. Select “Summarization” located in the “Categorize” box
4. In the “File Name” box, type “Similar Names”
5. Set the “Fields to Summarize” to “LastName”
6. Set “Then by” to “FirstName”
7. Click on (check) Hours and Gross Fields
8. Click “OK”



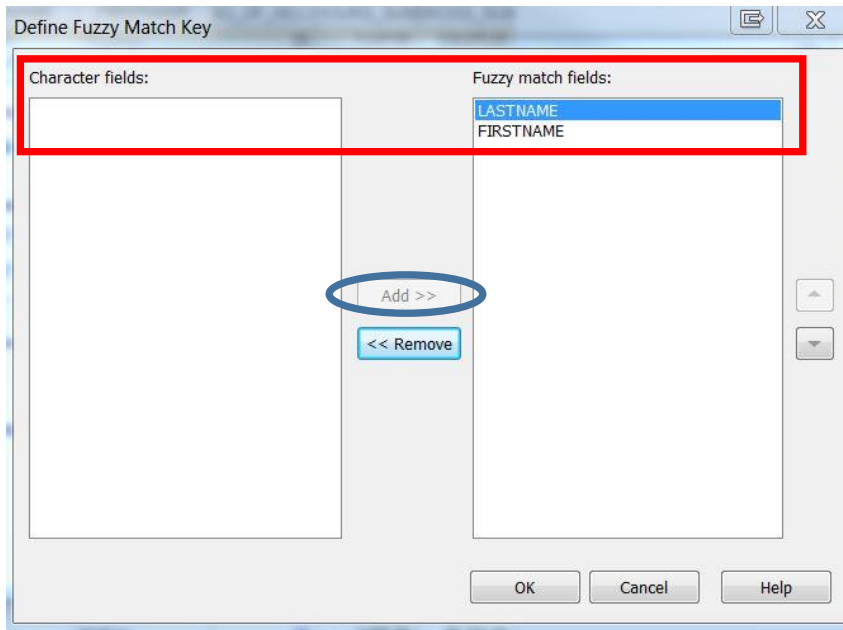
9. The “Summarization” database should be highlighted.

Second, identify “fuzzy” matches.

10. Click on the “Duplicate Key” in the “Explore” box
11. Click on “Fuzzy”
12. Leave the default options for “Output” and “Settings” unchanged
13. Click on “Key”



14. Click on "LastName" (red box)
15. Click on "Add >>" (blue oval)
16. Click on "FirstName" (red box)
17. Click on "Add >>" (blue oval)



18. Click "OK"

Payroll for Contractors - E... x Payroll Master File-Database x Sorted database1 x Summarization1 x Fuzzy Duplicate5 x

	GROUP_ID	GROUP_NAME	SIMILARITY_DEGRE	RECORD_NUM	LASTNAME	FIRSTNAME	NO_OF_REC	HOURS_SUM	GROSS_SUM
1	1	Ciotti-Shirley	1.0000	19	Ciotti	Shirley	17	647.00	72,248.00
2	1	Ciotti-Shirley	0.9167	20	Ciotti	Shirley	6	171.10	14,636.50

Student Task: Students should (a) click on the hyper-links (17 and 6) for both entries and (b) discuss the finding and recommend investigative next steps.

The results (solution):

Hyper-link for 17

RECORD	SS1	SS2	SS3	FIRSTNAME	LASTNAME	MI	STREET_ADDRESS	CITY	STATE	ZIP	DATE	HOURS	RATE	APR	GROSS	E_FICA	E_MC	E_401K	E_NET	CLIENT
1	120	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	1/11/2018	29.60	65	n/a	1,924.00	119.29	27.90	115.44	1,661.37	10008
2	203	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	2/16/2018	72.70	100	n/a	7,270.00	450.74	105.42	436.20	6,277.64	10001
3	249	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	3/9/2018	56.20	100	n/a	5,620.00	348.44	81.49	337.20	4,852.87	10005
4	287	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	3/30/2018	45.60	125	n/a	5,700.00	353.40	82.65	342.00	4,921.95	10008
5	300	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	4/6/2018	64.20	125	n/a	8,025.00	497.55	116.36	481.50	6,929.59	10012
6	316	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	4/20/2018	3.20	100	n/a	320.00	19.84	4.64	19.20	276.32	10008
7	333	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	4/27/2018	20.60	65	n/a	1,339.00	83.02	19.42	80.34	1,156.22	10006
8	390	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	5/25/2018	22.20	125	n/a	2,775.00	172.05	40.24	166.50	2,396.21	10001
9	403	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	6/1/2018	85.50	125	OK	10,687.50	662.63	154.97	641.25	9,229.65	10007
10	444	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	6/19/2018	57.70	125	n/a	7,212.50	447.18	104.58	432.75	6,227.99	10012
11	459	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	6/29/2018	42.40	100	n/a	4,240.00	262.88	61.48	254.40	3,561.24	10008
12	481	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	7/13/2018	22.80	125	n/a	2,850.00	176.70	41.33	171.00	2,460.97	10010
13	735	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	11/30/2018	11.60	125	n/a	1,450.00	89.90	21.03	87.00	1,252.07	10005
14	748	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	12/7/2018	19.00	100	n/a	1,900.00	117.80	27.55	114.00	1,640.65	10008
15	749	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	12/7/2018	14.40	100	n/a	1,440.00	89.28	20.88	86.40	1,243.44	10009
16	768	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	12/19/2018	16.70	100	n/a	1,670.00	103.54	24.22	100.20	1,443.04	10008
17	877	294	58	8447 Shirley	Ciotti	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	2/15/2019	62.60	125	n/a	7,825.00	485.15	113.46	469.50	6,756.89	10007

Hyper-link for 6

RECORD	SS1	SS2	SS3	FIRSTNAME	LASTNAME	MI	STREET_ADDRESS	CITY	STATE	ZIP	DATE	HOURS	RATE	APR	GROSS	E_FICA	E_MC	E_401K	E_NET	CLIENT
1	899	294	58	8447 Shirley	Ciotty	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	2/28/2019	32.60	125	n/a	4,075.00	252.65	59.09	244.50	3,518.76	10008
2	924	294	58	8447 Shirley	Ciotty	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	3/15/2019	2.70	80	n/a	216.00	13.39	3.13	12.96	186.52	10009
3	959	294	58	8447 Shirley	Ciotty	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	4/5/2019	37.30	100	n/a	3,730.00	231.26	54.09	223.80	3,220.85	10001
4	984	294	58	8447 Shirley	Ciotty	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	4/23/2019	68.00	65	n/a	4,420.00	274.04	64.09	265.20	3,816.67	10005
5	995	294	58	8447 Shirley	Ciotty	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	5/3/2019	16.30	65	n/a	1,059.50	65.69	15.36	63.57	914.88	10012
6	1054	294	58	8447 Shirley	Ciotty	J.	14220 S Meridian Ave	Oklahoma City	OK	73173-8807	6/14/2019	14.20	80	n/a	1,136.00	70.43	16.47	68.16	980.94	10012

The first name and address for these entries are identical. The interesting observation is that Coitty is dated February 28, 2019 or after while Coitti are all before February 28, 2019. All other aspects of company policy appear in compliance. Both names are in the payroll master file. Additional inquiry into this anomaly is warranted.

Assignment 10

Question: Is Fairmont in compliance with their payroll rates schedule: \$65, \$80, \$100 and \$125?

1. Click on the "Payroll for Contractors" database
2. Click on "Analysis"
3. Click "Summarization" in the "Categorize" box
4. For "Fields to summarize", click on the down-arrow and change "Rate"
5. For Numeric fields to total, click on "Hours," "Gross" and E_Net"
6. Click "OK"

The screenshot shows the 'Summarization' dialog box with the following settings:

- Fields to summarize:**
 - By: RATE
 - Then by: NONE
 - Then by: (empty)
 - Then by: (empty)
 - Then by: (empty)
 - Then by: (empty)
 - Then by: (empty)
 - Then by: (empty)
- Criteria:** (empty)
- Use Quick Summarization:**
- Create database:**
- Include % in output database:**
- Use fields from first occurrence:**
- Use fields from last occurrence:**
- File:** Summarization2
- Numeric fields to total:**
 - RECORD
 - SS1
 - SS2
 - SS3
 - HOURS
 - RATE
 - GROSS
 - E_FICA
 - E_MC
 - E_401K
 - E_NET
 - CLIENT
- Statistics to include:**
 - Sum
 - Average
 - Maximum
 - Variance
 - Minimum
 - Standard deviation
- Create result:**
- Result name:** Summarization

Student Task: Students should (a) present a listing of payroll disbursements by rate and (b) discuss the finding and recommend investigative next steps.

The results (solution):

	RATE	NO_OF_RECS	HOURS	SUMGROSS	SUME_NET	SUM
1	65	228	10,214.60	663,949.00	575,473.13	
2	80	92	4,000.20	320,016.00	277,216.64	
3	100	405	19,066.20	1,906,620.00	1,654,179.18	
4	125	261	12,602.50	1,575,312.50	1,367,263.98	

According to the background information, Fairmont charges \$65, \$80, \$100, and \$125 per hour. Those are the rates being charged. No anomaly noted.

Assignment 11

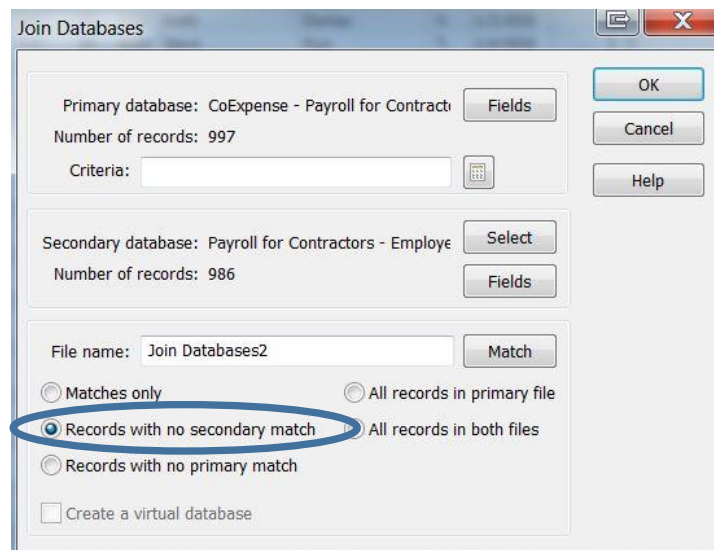
Question: Does the Fairmont payroll system's company expense file match to its payroll disbursements file?

Step 1: Import the Company Expense file

1. Click on "Desktop".
2. Click on "Microsoft Excel" and locate the file "CoExpense - Payroll for Contractors"
3. Click on "first row is field names".
4. Click "OK" (The file should have 997 records, sorted in record/date order)

Step 2: Join the company expense and payroll disbursements file

5. Under "Analysis," click on "Join" from the "Relate" box. Note that the primary database is the company expense file sorted in record order
6. Click on "Select" to identify the database to join to the payroll disbursements data (sorted on record/date order).
7. In the "Select Database" box, click on "Payroll for Contractors" (986 records)
8. Click "OK"
9. Click on "Match" in the "Join Databases" Box
10. In the "Match Key Fields" select "Record" in the primary and secondary columns and "ascending" in the order column
11. Click "OK"



12. Select "Records with no secondary match"
13. Click "OK"

Student Task: Students should (a) present a listing of company expense disbursements that do not appear to have corresponding disbursements in the payroll system and (b) discuss the finding and recommend investigative next steps.

The results (solution):

RECORD	SS1	SS2	SS3	FIRSTNAME	LASTNAME	MI	DATE	COL9	DUP	CO_FICA	CO_MC	CO_401K	CLIENT
1	614	574	30	7033	Mary	Perez	J. 9/21/2018	6	1	1,274.94	1,688.12	1,259.20	10008
2	700	574	30	7033	Mary	Perez	J. 11/9/2018	6	1	582.31	771.02	575.12	10008
3	794	574	30	7033	Mary	Perez	J. 12/28/2018	6	1	1,010.88	1,338.48	998.40	10008
4	809	574	30	7033	Mary	Perez	J. 1/4/2019	6	1	1,464.08	1,938.54	1,446.00	10008
5	815	574	30	7033	Mary	Perez	J. 1/10/2019	5	0	206.39	273.27	203.84	10008
6	855	574	30	7033	Mary	Perez	J. 2/1/2019	6	0	767.23	1,015.87	757.76	10008
7	874	574	30	7033	Mary	Perez	J. 2/8/2019	6	1	657.72	870.87	649.60	10008
8	885	574	30	7033	Mary	Perez	J. 2/15/2019	6	1	865.08	1,145.43	854.40	10008
9	941	574	30	7033	Mary	Perez	J. 3/22/2019	6	1	1,150.20	1,522.95	1,136.00	10008
10	973	574	30	7033	Mary	Perez	J. 4/12/2019	6	1	1,258.74	1,666.67	1,243.20	10008
11	1076	574	30	7033	Mary	Perez	J. 6/21/2019	6	1	366.53	485.31	362.00	10008

The company expense file had 997 records while the payroll disbursements file only had 986 records. The difference is 11 records, those noted in the graphic above. The withholding to the federal government for FICA and Medicare are for Mary Perez, an accounting clerk who works with payroll. Students might have a difficult time considering the rationale. A possible scheme is that Ms. Perez applies to the federal government for a refund through an amended return, collects the check when it comes into accounting and cashes the check. Ms. Perez is also adding to her 401K retirement account. The non-compliance has been charged to one client, client 10008 who has complained about the amount of charges from Fairmont.

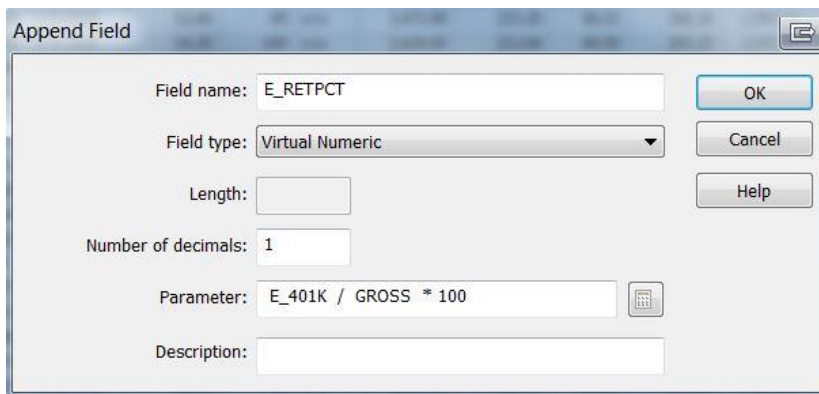
Perez applies to the federal government for a refund through an amended return, collects the check when it comes into accounting and cashes the check. Ms. Perez is also adding to her 401K retirement account. The non-compliance has been charged to one client, client 10008 who has complained about the amount of charges from Fairmont. Additional inquiry into this anomaly is warranted.

Assignment 13

Question: The HR (human resources) department has requested some assistance. They would like to identify all employees who are not withholding the maximum savings amount for the 401K retirement plan of 6% to invite them to some retirement planning training sessions.

Step 1: Create a percentage calculation for the payroll withholding percentage.

1. Click on the "Payroll for Contractors" File
2. Click on "Data"
3. Click on "Append"
4. Type Name "E_RETPTCT"
5. Leave "virtual numeric" unchanged
6. Change the "Number of decimals" from "0" to "1"

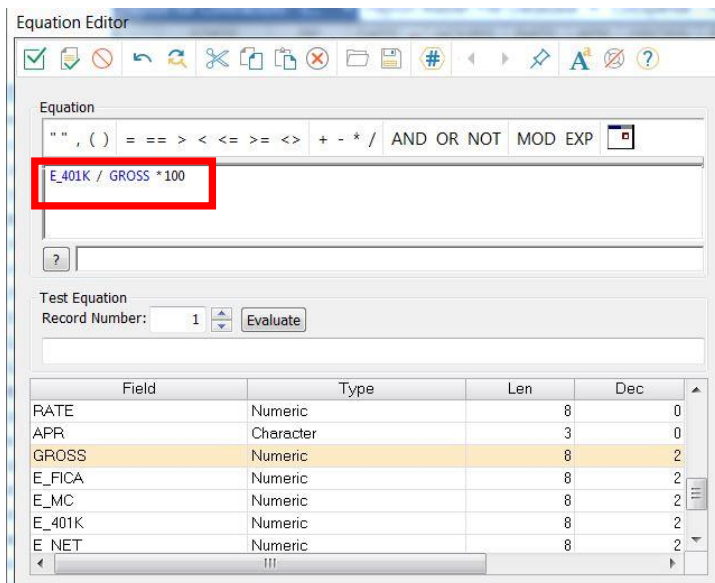


The "Append Field" dialog box is shown with the following settings:

- Field name: E_RETPTCT
- Field type: Virtual Numeric
- Length: (empty)
- Number of decimals: 1
- Parameter: E_401K / GROSS * 100
- Description: (empty)

Buttons: OK, Cancel, Help

7. Click on the equation editor (to the right of parameter)
8. Create the new field using the calculation "E_401K / Gross * 100" (red box)
9. Click on the green check mark (top left-corner)
10. Click "OK"



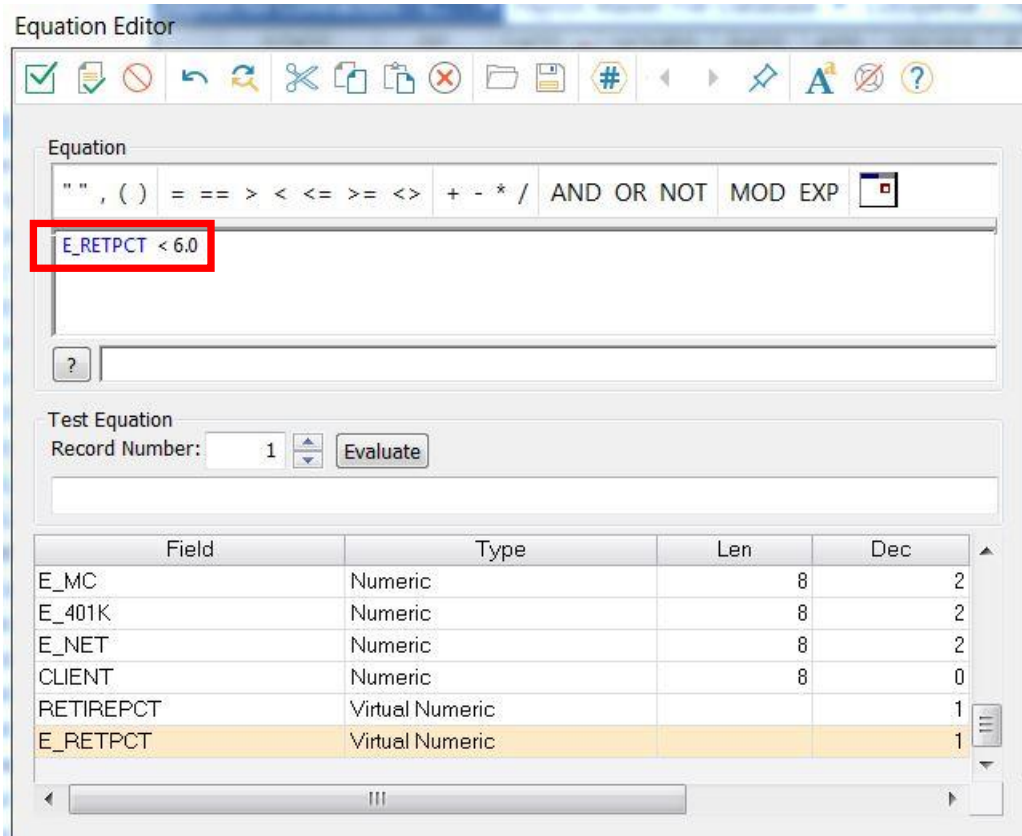
The "Equation Editor" dialog box is shown with the following settings:

- Equation: E_401K / GROSS * 100 (highlighted in a red box)
- Test Equation: Record Number: 1, Evaluate
- Table:

Field	Type	Len	Dec
RATE	Numeric	8	0
APR	Character	3	0
GROSS	Numeric	8	2
E_FICA	Numeric	8	2
E_MC	Numeric	8	2
E_401K	Numeric	8	2
E_NET	Numeric	8	2

Step 2: Extract record where the 401K withholding percentage is less than 6%

11. Under the “Analysis” Tab, click on “Direct” under “Extract”
12. Click on the equation editor
13. Create the formula: “E_RETPCT < 6.0” (red box)
14. Click on green check-mark
15. Click “OK”



Student Task: Students should (a) examine the listing of employees and note the “E_RetPCT” percentage for the employees whose 401K withholding percentage is less than 6% and (b) discuss the finding and recommend investigative next steps.

Result (Solution):

By clicking on the “LastName” column and sorting by last name, four employees are below 6% for their 401K contributions:

- Corbett - 1%
- Dalton – 1%
- Delgado – 0%
- Upchurch – 2%

No anomaly is identified nor are additional investigative steps required.

Assignment 14

Question: Do the payroll disbursement hours comply with Benford's Law?

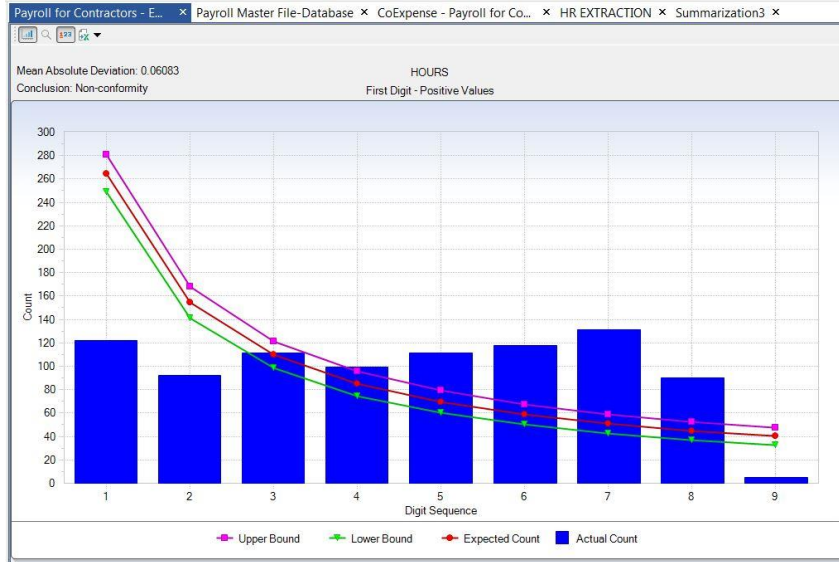
1. Click on the "Payroll for Contractors" database.
2. Under the "Analysis" Tab, click on "Benford's Law" in the "Explore" box
3. Change the "Field to analyze" to "Hours"
4. As noted below, unclick the boxes below to create Benford's Law for only the "First digit".
5. Click "OK"

The screenshot shows the 'Benford's Law' dialog box with the following settings:

- Field to analyze: HOURS
- Include Values: Positive (selected), Negative (unselected)
- Options: Show boundaries (checked), Mean absolute deviation (checked)
- Result: Create result (checked), Benford
- Analysis:
 - Test: First digit (checked), First two digits (unchecked), First three digits (unchecked), Second digit (unchecked), Last two digits (unchecked), Second order (unchecked), Summation (unchecked)
 - Create database: Benford First Digit1 (unchecked), Benford First Two Digits1 (unchecked), Benford First Three Digits1 (unchecked), Benford Second Digit1 (unchecked), Benford Last Two Digits1 (unchecked), Benford Second Order1 (unchecked), Benford Summation1 (unchecked), Create a virtual database (unchecked)

Student Task: Students should (a) present the Benford's Law results and (b) discuss the finding and recommend investigative next steps.

Result (Solution):



This data does not comply with Benford's Law. This data has various policy constraints (e.g., the rates per hours) and natural characteristics (e.g., persons tend to work more than 10 hours per week and most persons work 80 hours per week or fewer) that do not comply with Benford's Law requirements. As such, this dataset is not conducive to a Benford's Law analysis. No anomaly is identified nor are additional investigative steps required.

Assignment 15

Summarize the Anomalies of Concern to a forensic auditor

Number	Description	Anomalies
1	Importing data and ensuring that the file imports correctly	None
2	Do any accounting or payroll personnel or related parties appear on the contractor payroll?	The payroll manager, Christine Alexander, and general accountant, Carrie Rutten, both have payroll dollars. Helene Earls is a related party.
3	Is Fairmont in compliance with Federal withholding requirements for FICA and Medicare?	During the one week period November 19 through November 23, 2018, no employee withholding occurred for FICA / Medicare.
4	Is Fairmont in compliance with company policy that requires explicit approval of all hours of 80 hours or more?	17 records, all for a related party (Earls), are out of compliance, missing the required approvals.
5	Does Fairmont have any duplicate payroll records?	Six payroll disbursements were paid twice (accounting employee, as well).
6	Does Fairmont have any payroll processing on the weekends?	Eight transactions were processed on a Saturday (accounting employee, as well).
7	Does Fairmont have any contactor personnel who are being paid but are not on the payroll master file?	None
8	Does Fairmont have any contactor personnel who have terminated but are being paid through payroll (e.g., ghost employee)?	One possible ghost employee: Theresa Angelina
9	Does Fairmont have any personnel whose last name is similar?	One possible issue needs resolved: Coitti vs. Coitty
10	Is Fairmont in compliance with their payroll rates schedule: \$65, \$80, \$100 and \$125?	None
11	Does the Fairmont payroll system's company expense file match to its payroll disbursements file?	11 records with company payroll expense but no payroll disbursement: Mary Perez (accounting clerk)
12	Does the payroll disbursements file being analyzed appear to have all of the payroll records disbursed during the period January 3, 2018 to June 28, 2019?	11 records with company payroll expense but no payroll disbursement: Mary Perez (accounting clerk)
13	The HR (human resources) department would like to identify all employees who are not withholding the maximum savings amount for retirement of 6%.	None.
14	Do the payroll records comply with Benford's Law?	Not applicable.
15	Summarize forensic accounting concerns that require follow-up examination	See this table.
16	Write a report	

Assignment 16

Write a report

The written report should describe in some detail the anomalies identified in this forensic audit of the payroll records. The anomalies are summarized in the table prepared as part of assignment 15 and additional details are provided for each assignment solution.