## BA 640 Assignment #10

**Due July 21 by 11:59 pm** (submit your .py file via the "Assignment #10" Canvas link.)

## Create a Python program that does the following.

- 1. Create and display a data frame with the following attributes: (10 points)
  - Contains four rows and six columns
  - The data in the data frame is made up of random numbers between 10 and 99
  - The data frame columns are labeled 'A', 'B', 'C', 'D', 'E', and 'F'
  - The data frame indices are 'Jane', 'Mary', 'Bob', and 'Mark'

Format you output as shown in the example below (include the header). Your numbers will be different.

Data	frame of		ran	dom	numbers		
	A	В	С	D	E	F	
Jane	37	54	28	34	12	84	
Mary	55	77	95	12	34	60	
Bob	45	13	25	48	41	55	
Mark	70	47	23	33	71	39	
l							

2. Print the row and column totals of the data frame created for question 1. (15 points)

Format you output as shown in the example below (include the header). Your numbers will be different.

	Data	frame row totals
	Jane	249
	Mary	333
	Bob	227
	Mark	283
	Data	frame column totals
	A	207
	В	191
	С	171
	D	127
	E	158
	F	238
ı	г	230

3. Print the mean of the column totals calculated for question 2. (15 points)

Format you output as shown in the example below. Your numbers will be different.

```
Mean of data frame row totals: 273.0 Mean of data frame column totals: 182.0
```

Use the data in *salary.csv* file for questions 4 through 7 of the assignment. The file contains salary data for individuals employed by the city of San Francisco from 2013 to 2019.

4. Print the average salary of city workers by year. (15 points)

Format your output as shown in the example below (include the header). Your numbers will be similar to those below.

Avera	ge salary by year							
	salary							
year								
2013	91795							
2014	90875							
2015	92148							
2016	94561							
2017	77807							
2018	95647							
2019	88052							

## BA 640 Assignment #10

5. Print the average salary of city workers by organization within year. (15 points)

Format your output as shown in the example below (include the header). Your numbers will be similar to those below.

Arron	age sailary by expanigation within year	
Aver	age sailary by organization within year	-
wear	organization	salary
2013	Community Health	86157
2010	Culture & Recreation	65813
	General Administration & Finance	84865
	General City Responsibilities	42463
	Human Welfare & Neighborhood Development	72930
	Public Protection	121774
	Public Works, Transportation & Commerce	84765
2014	Community Health	86002
	Culture & Recreation	66193
	General Administration & Finance	84624
	General City Responsibilities	58922
	Human Welfare & Neighborhood Development	70239
	Public Protection	119505
	Public Works, Transportation & Commerce	84695
2015	Community Health	87800
	Culture & Recreation	67553
	General Administration & Finance	87308
	Human Welfare & Neighborhood Development	74657
	Public Protection	121622
	Public Works, Transportation & Commerce	84781
2016	Community Health	90744
	Culture & Recreation	68562
	General Administration & Finance	88777
	General City Responsibilities	25844
	Human Welfare & Neighborhood Development	76725
	Public Protection	123151
0045	Public Works, Transportation & Commerce	87952
2017	Community Health	75450
	Culture & Recreation	58234
	General Administration & Finance	75048
	General City Responsibilities	25844
	Human Welfare & Neighborhood Development	62622
	Public Protection	97958
2010	Public Works, Transportation & Commerce	72975 93414
_ ∠∪⊥8	Community Health Culture & Recreation	93414 68169
	General Administration & Finance	93004
	General City Responsibilities	95453
	Human Welfare & Neighborhood Development	78616
	Public Protection	120409
	Public Works, Transportation & Commerce	90566
2019	Community Health	85686
2017	Culture & Recreation	65008
	General Administration & Finance	84832
	General City Responsibilities	87211
	Human Welfare & Neighborhood Development	73127
	Public Protection	111475
	Public Works, Transportation & Commerce	83533

6. Print the average salary of fire fighters and the number of fire fighters in the city by year. (15 points)

Format your output as shown in the example below. Your numbers will be similar to those below.

Avera	ge salar	y and total	number	of f	firefighters	by	year
	salary	count					
year							
2013	154787	1514					
2014	145226	1586					
2015	144375	1578					
2016	142182	1680					
2017	106058	1730					
2018	129527	2665					
2019	117382	2582					
1							

## BA 640 Assignment #10

7. Create a pivot table that shows the mean salary of each job category in the city by year and print the pivot table. *Your numbers will match those below.* (15 points)

Administrative & Mgmt (Unrep)		2013	2014	2015	2016	2017	2018	2019
Administrative Secretarial   R1619   R182328   169316   274702   20347   18554   231353   251842   231464   231471   2	jobCategory							
Administrative=DPW/PIDC   112299   120622   123773   127712   127712   13432   13432   Administrative=DPW/PIDC   112299   120622   123773   127712   127712   13432   Administrative=DPW/PIDC   112299   120622   123773   127712   127712   13432   Administrative=DPW/PIDC   12299   124993   125738   129904   117178   116955   113432   Administrative=Abors & Trates   122849   124993   125738   129904   117178   116955   113432   Administration   82758   80802   83513   81831   65270   86542   65273   Administration   82758   80802   83513   81831   65270   86542   65270   80542   80542	-	182328	169316	274702	203347	185554	231353	251842
Administrative-Labor & Trades   122849   128971   127742   98432   13496   113422   Administrative-Labor & Trades   63705   63428   64873   66803   54887   67348   52015   Airport Operation   82758   80802   83513   81831   66833   54887   67348   52015   67348   67348   52015   67348   67348   67348   52015   67348   6734	1							
Agriculture & Horticulture								
Airport Operation	Administrative-Labor & Trades	122849	124993	125738	129504	117178	116955	111292
Appraisal & Taxation   70170   74207   77195   76672   64253   76889   65409   Budget, Amm & Stats Analysis   73009   77025   77248   78551   65492   79836   73681   73009   730725   77248   78551   65492   79836   73681   73009   73061   73965   73681   73975   7397	Agriculture & Horticulture	63705	63428	64873	66833	54887	67348	52015
Budget, Admm & Stats Analysis   79009   77025   77248   78551   65492   79836   73681     Clerical, Secretarial & Steno   58181   57898   58481   60392   49377   60914   52646     Community Development   73965   75618   75791   81553   67200   81234   73730     Computer Operatins & Repro Svcs   58977   75541   58151   58379   50586   62012   54691     Construction Inspection   98385   98075   92703   92380   76996   39345   84223     Construction Project Mgmt   120933   122159   123901   123280   106681   120345   109461     Dietary & Food   51805   51070   53183   55186   47973   56526   53564     Emergency Coordination   0	Airport Operation	82758	80802	83513	81831	65270	86542	69527
Clerical, Secretarial & Siene   59181   57898   59481   60392   4937   60914   52664   Community Development   73965   75618   75791   81533   67200   81234   73330   Computer Operatins & Repro Svcs   58977   57541   58151   59379   50586   62012   54691   Construction Inspection   109473   109237   114507   12239   106863   124139   114562								
Community Development	1 2 .							
Computer Operatins & Repro Svcs   58977   57541   58151   59379   50586   62012   54691   Construction Inspection   98395   89075   92703   92380   76996   8458   84232   Construction Project Mgmt   120933   122159   123901   123280   106881   124139   114563   Correction & Detention   109473   109237   114507   122239   100668   120345   109461   109467   109237   114507   122239   100668   120345   109461   109467   109237   114507   122239   100668   120345   109461   109467   109467   122239   100668   120345   109461   109467   109467   122239   100668   120345   109461   109467   120345   109467   109467   122239   100668   120345   109461   109467   120345   109467   109467   122239   100668   120345   109461   109467   120345   109467   109467   120345   109467   109467   120345   120345   109467   120345   12	<b>■</b>							
Construction Inspection	1							
Construction Project Mgmt								
Correction & Detention	=							
Bietary & Food	1							
Emergency Coordination         0         0         0         0         94956         82482           Emergency Services         59590         79167         80331         89122         69276         0           Fire Services         160234         152724         151145         151427         112878         134637         127411           Health & Sanitation Inspection         98502         98235         89076         98278         78622         99090         90291           Hospital Administration         64456         63974         65249         67674         54975         68144         61187           Housekeeping & Laundry         54674         55092         56591         58071         47613         60143         58467           Human Services         74387         71122         75723         77714         62637         78925         72664           Information Systems         90461         99316         100791         101233         84440         107293         98486           Journeyman Trade         92745         92778         95349         99686         82655         102033         94361         107293         94866           Lagla & Court         115015         11415								
Emergency Services	1							
Renergy & Environment								
Fire Services								
Bealth & Sanitation Inspection   98502   98235   89076   98278   78622   99090   90291   Hospital Administration   64456   63974   65249   67674   54975   68144   61187   Housekeeping & Laundry   54674   55092   56591   58071   47613   60143   54876   Human Services   74387   71182   75723   77714   62637   78925   72664   Thrormation Systems   90461   99316   100791   101233   84440   107293   98468   Journeyman Trade   92745   92778   95349   99686   82615   102053   92650   Lab, Pharmacy & Med Techs   85399   85431   87368   90730   74311   89860   84195	<b>■</b>							
Housekeeping & Laundry								90291
Human Services	=	64456	63974	65249	67674	54975	68144	61187
Information Systems 90461 99316 100791 101233 84440 107293 98486 Journeyman Trade 92745 92778 95349 99686 82615 102053 92650	Housekeeping & Laundry	54674	55092	56591	58071	47613	60143	54876
Journeyman Trade	Human Services	74387	71182	75723	77714	62637	78925	72664
Lab, Pharmacy & Med Techs	Information Systems	90461	99316	100791	101233	84440	107293	98486
Legal & Court         115015         114915         118006         121561         99638         124268         114367           Library         58362         57937         58740         58677         53404         58595         60534           MTA Operations         0         0         0         0         0         69547         65508           Management         127432         125809         130694         133645         109128         140130         127346           Med Therapy & Auxiliary         68887         69670         71048         69897         59916         73317         65852           Medical & Dental         127862         125842         139911         148365         122782         156239         135413           Museum & Cultural Affairs         61361         63006         67145         68441         56406         68049         64181           Nursing         97308         97058         98556         103390         85500         105972         97241           Parycoll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689 <t< td=""><td>Journeyman Trade</td><td>92745</td><td>92778</td><td>95349</td><td>99686</td><td>82615</td><td>102053</td><td>92650</td></t<>	Journeyman Trade	92745	92778	95349	99686	82615	102053	92650
Library 58362 57937 58740 58677 53404 58595 60534 MTA Operations 0 0 0 0 0 0 69547 65508 Management 127432 125809 130694 133645 109128 140130 127346 Med Therapy & Auxiliary 68887 69670 71048 68897 59916 73317 65852 Medical & Dental 127862 125842 139911 148365 122782 156239 135413 Museum & Cultural Affairs 61361 63006 67145 68441 56406 68049 64181 Nursing 97308 97058 98556 103390 85500 105972 97241 Park & Zoo 54404 54487 54550 54945 46037 57186 54749 Payroll, Billing & Accounting 66944 66801 68955 69800 60450 73684 68575 Personnel 73250 70378 70689 74720 6255 76385 71611 Police Services 130811 129257 131721 130274 106461 134093 122640 Port Operation 111368 113104 105407 102366 90435 110592 109445 Probation & Parole 83305 83740 89131 92181 74320 81161 76877 Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Service Aide 34557 34018 35545 37715 36407 3720 69632 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 52525 55348 56971 58424 47569 53851 52145 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 82504 66132 86299 83177 84455 66687 0 0 0 52454 66880 57446 68800 57446 56983 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 57446 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0 0 58660 57446 68980 5744 0 0	Lab, Pharmacy & Med Techs	85399	85431	87368	90730	74311	89860	84195
MTA Operations         0         0         0         0         69547         65508           Management         127432         125809         130694         133645         109128         140130         127346           Med Therapy & Auxiliary         68887         69670         71048         69887         59916         73317         65852           Medical & Dental         127862         125842         139911         148365         122782         156239         135413           Museum & Cultural Affairs         61361         63006         67145         68441         56406         68049         64181           Nursing         97308         97058         98556         103390         85500         105972         297241           Park & Zoo         54404         54487         54550         54945         46037         57166         54749           Payroll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689         74720         62555         76385         71611           Police Services         133811         129257         131721         130274	Legal & Court		114915			99638	124268	
Management         127432         125809         130694         133645         109128         140130         127346           Med Therapy & Auxiliary         68887         69670         71048         69897         59916         73317         65852           Medical & Dental         127862         125842         139911         148365         122782         156239         135413           Museum & Cultural Affairs         61361         63006         67145         68441         56406         68049         64181           Nursing         97308         97058         98556         103390         85500         105972         97241           Park & Zoo         54404         54487         54550         54945         46037         57186         54749           Payroll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689         74720         62555         76385         71611           Police Services         130811         129257         131721         130274         106461         134033         122640           Portacione         Aparle         83305 <td< td=""><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1							
Med Therapy & Auxiliary         68887         69670         71048         69897         59916         73317         65852           Medical & Dental         127862         125842         139911         148365         122782         156239         135413           Museum & Cultural Affairs         61361         63006         67145         68841         56406         68049         64181           Nursing         97308         97058         98556         103390         85500         105972         97241           Park & Zoo         54404         54487         54550         54945         46037         57186         54749           Payroll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689         74720         62555         76385         71611           Police Services         130811         129257         131721         130274         106461         134093         122640           Port Operation         111368         113104         105407         102366         90435         110592         109445           Probation & Parole         83305         83740	<b>■</b>							
Medical & Dental         127862         125842         139911         148365         122782         156239         135413           Museum & Cultural Affairs         61361         63006         67145         68441         56406         68049         64181           Nursing         97308         97058         98556         103390         85500         105972         97241           Park & Zoo         54404         54487         54550         54945         46037         57186         54749           Payroll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689         74720         62555         76385         71611           Police Services         130811         129257         131721         130274         106461         134093         122640           Port Operation         111368         113104         105407         102366         90435         110592         109445           Probation & Parole         83305         83740         89131         92181         74320         81161         76877           Professional Engineering         101639         99344 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Museum & Cultural Affairs         61361         63006         67145         68441         56406         68049         64181           Nursing         97308         97058         98556         103390         85500         105972         97241           Park & Zoo         54404         54487         54550         54945         46037         57186         54749           Payroll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689         74720         62555         76385         71611           Police Services         130811         129257         131721         130274         106461         134093         122640           Port Operation         111368         113104         105407         102366         90435         110592         109445           Probation & Parole         83305         83740         89131         92181         74320         81161         76877           Professional Engineering         101639         99344         99439         101361         82864         100969         92834           Property Administration         90513         95139 <td>I = = = = = = = = = = = = = = = = = = =</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	I = = = = = = = = = = = = = = = = = = =							
Nursing 97308 97058 98556 103390 85500 105972 97241 Park & Zoo 54404 54487 54550 54945 46037 57186 54749 Payroll, Billing & Accounting 66944 66801 68955 69800 60450 73684 68575 Personnel 73250 70378 70689 74720 62555 76385 71611 Police Services 130811 129257 131721 130274 106461 134093 122640 Port Operation 111368 113104 105407 102366 90435 110592 109445 Probation & Parole 83305 83740 89131 92181 74320 81161 76877 Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation \$55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 6010 52454 68980 55744 0 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
Park & Zoo         54404         54487         54550         54945         46037         57186         54749           Payroll, Billing & Accounting         66944         66801         68955         69800         60450         73684         68575           Personnel         73250         70378         70689         74720         62555         76385         71611           Police Services         130811         129257         131721         130274         106461         134093         122640           Port Operation         111368         113104         105407         102366         90435         110592         109445           Probation & Parole         83305         83740         89131         92181         74320         81161         76877           Professional Engineering         101639         99344         99439         101361         82864         100969         92834           Property Administration         90513         95139         92707         95703         85026         99204         73650           Probation & Apprehension         74134         75489         78796         82572         65395         78265         68745           Pub Relations & Spec Assts         68008								
Payroll, Billing & Accounting   66944   66801   68955   69800   60450   73684   68575   Personnel   73250   70378   70689   74720   62555   76385   71611   70160   70								
Personnel 73250 70378 70689 74720 62555 76385 71611 Police Services 130811 129257 131721 130274 106461 134093 122640 Port Operation 111368 113104 105407 102366 90435 110592 109445 Probation & Parole 83305 83740 89131 92181 74320 81161 76877 Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64555 63283 666610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 0 0 260856 202323								
Police Services 130811 129257 131721 130274 106461 134093 122640 Port Operation 111368 113104 105407 102366 90435 110592 109445 Probation & Parole 83305 83740 89131 92181 74320 81161 76877 Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 260856 202323								
Port Operation 111368 113104 105407 102366 90435 110592 109445 Probation & Parole 83305 83740 89131 92181 74320 81161 76877 Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
Probation & Parole 83305 83740 89131 92181 74320 81161 76877 Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 260856 202323								
Professional Engineering 101639 99344 99439 101361 82864 100969 92834 Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 0 0 260856 202323	<u> </u>							
Property Administration 90513 95139 92707 95703 85026 99204 73650 Protection & Apprehension 74134 75489 78796 82572 65395 78265 68745 Pub Relations & Spec Assts 68008 65766 68523 67256 55898 66333 65278 Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			99344		101361	82864		
Pub Relations & Spec Assts         68008         65766         68523         67256         55898         66333         65278           Public Health         90746         90152         92987         90673         77066         94096         84626           Public Safety Inspection         102559         104599         105071         107379         84918         109690         96692           Public Service Aide         34557         34018         35545         37715         36407         36727         34645           Purchasing & Storekeeping         67760         68753         68551         70658         56797         72700         69235           Recreation         55225         55348         56971         58424         47569         53851         52145           Revenue         64132         65083         67486         68603         57450         72345         59629           SF Redevelopment Agency         0         0         52454         68980         55744         0         0           Semi-Skilled & General Labor         60517         61451         62006         62900         53426         63647         59697           Skilled Labor         81297         78604		90513	95139	92707	95703	85026	99204	73650
Public Health 90746 90152 92987 90673 77066 94096 84626 Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 60206 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 260856 202323		74134	75489	78796	82572	65395	78265	68745
Public Safety Inspection 102559 104599 105071 107379 84918 109690 96692 Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 66206 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 260856 202323	Pub Relations & Spec Assts	68008	65766	68523	67256	55898	66333	65278
Public Service Aide 34557 34018 35545 37715 36407 36727 34645 Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 260856 202323	Public Health	90746	90152	92987	90673	77066	94096	84626
Purchasing & Storekeeping 67760 68753 68551 70658 56797 72700 69235 Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 260856 202323		102559		105071	107379	84918		
Recreation 55225 55348 56971 58424 47569 53851 52145 Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 260856 202323								
Revenue 64132 65083 67486 68603 57450 72345 59629 SF Redevelopment Agency 0 0 52454 68980 55744 0 0 SF Superior Court 85239 82699 83177 84455 66687 0 0 Semi-Skilled & General Labor 60517 61451 62006 62900 53426 63647 59697 Skilled Labor 81297 78604 77960 81514 66506 86272 79535 Street Transit 80377 79747 77512 79984 66759 86061 81779 Sub-Professional Engineering 63277 64552 63283 66610 57067 64068 57126 Supervisory-Labor & Trade 104023 103338 109043 112869 91439 111535 105093 Unassigned 0 0 0 0 0 0 260856 202323								
SF Redevelopment Agency       0       0       52454       68980       55744       0       0         SF Superior Court       85239       82699       83177       84455       66687       0       0         Semi-Skilled & General Labor       60517       61451       62006       62900       53426       63647       59697         Skilled Labor       81297       78604       77960       81514       66506       86272       79535         Street Transit       80377       79747       77512       79984       66759       86061       81779         Sub-Professional Engineering       63277       64552       63283       66610       57067       64068       57126         Supervisory-Labor & Trade       104023       103338       109043       112869       91439       111535       105093         Unassigned       0       0       0       0       0       260856       202323								
SF Superior Court       85239       82699       83177       84455       66687       0       0         Semi-Skilled & General Labor       60517       61451       62006       62900       53426       63647       59697         Skilled Labor       81297       78604       77960       81514       66506       86272       79535         Street Transit       80377       79747       77512       79984       66759       86061       81779         Sub-Professional Engineering       63277       64552       63283       66610       57067       64068       57126         Supervisory-Labor & Trade       104023       103338       109043       112869       91439       111535       105093         Unassigned       0       0       0       0       0       0       260856       202323								
Semi-Skilled & General Labor     60517     61451     62006     62900     53426     63647     59697       Skilled Labor     81297     78604     77960     81514     66506     86272     79535       Street Transit     80377     79747     77512     79984     66759     86061     81779       Sub-Professional Engineering     63277     64552     63283     66610     57067     64068     57126       Supervisory-Labor & Trade     104023     103338     109043     112869     91439     111535     105093       Unassigned     0     0     0     0     0     260856     202323								
Skilled Labor       81297       78604       77960       81514       66506       86272       79535         Street Transit       80377       79747       77512       79984       66759       86061       81779         Sub-Professional Engineering       63277       64552       63283       66610       57067       64068       57126         Supervisory-Labor & Trade       104023       103338       109043       112869       91439       111535       105093         Unassigned       0       0       0       0       260856       202323	1 = =							
Street Transit       80377       79747       77512       79984       66759       86061       81779         Sub-Professional Engineering       63277       64552       63283       66610       57067       64068       57126         Supervisory-Labor & Trade       104023       103338       109043       112869       91439       111535       105093         Unassigned       0       0       0       0       260856       202323								
Sub-Professional Engineering       63277       64552       63283       66610       57067       64068       57126         Supervisory-Labor & Trade       104023       103338       109043       112869       91439       111535       105093         Unassigned       0       0       0       0       260856       202323								
Supervisory-Labor & Trade       104023       103338       109043       112869       91439       111535       105093         Unassigned       0       0       0       0       260856       202323								
Unassigned 0 0 0 0 260856 202323								
	_ =							
0 0 0 0 91010 01074	1							
	one tete	U	U	U	U	U	21010	010/4