

CALIFORNIA STATE POLYTECHNIC UNIVERSITY
Department of Computer Science

CS 4650

N.D.

Project 1(Excel)

All questions refer to the Excel Sheet(Questions.xlsx)

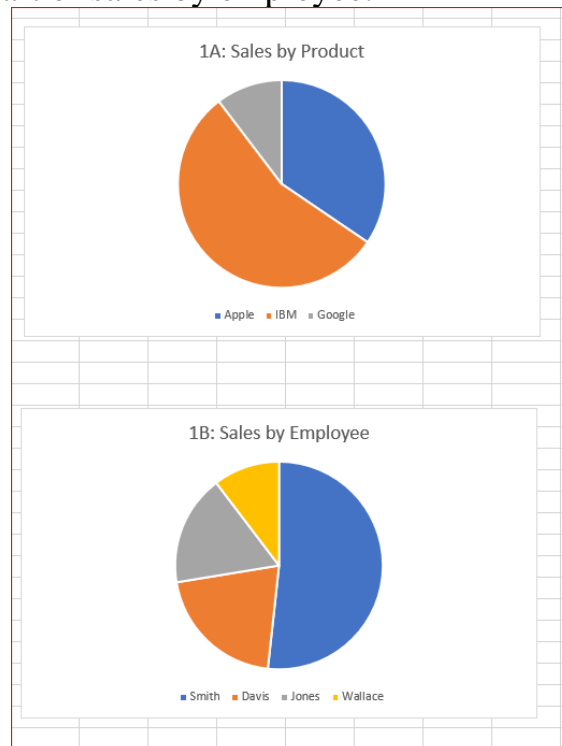
Screen Capture results and save in a PDF or DOC file. Submit assignment on Blackboard.

All screen shots should be upright in orientation and the questions should be answered in order.

NOTE: You are encouraged to HELP each other on SLACK! Do not share screen shots but, assist each other on how to complete this assignment. Ask each other for help in the Questions and Answers channel.

1a) Create a pie chart of the sales by product columns.

1b) Create a bar chart of sales by employee.



2) Filter the sales data to show only sales for the South region and then sort the sales from highest to lowest.

Salesperson	Region	Sales	
Lewis	South	1700	
Smith	South	1000	

3) Save the automotive data as a .csv file. Comma Separated File.

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Questions.csv - Notepad
File Edit Format View Help
mpg,cylinders,displacement,horsepower,weight,acceleration,model year,origin,car name
18,8,307,130,3504,12,70,1,chevrolet chevelle malibu
15,8,350,165,3693,11.5,70,1,chevrolet chevelle malibu
18,8,318,150,3436,11,70,1,plymouth satellite
16,8,304,150,3433,12,70,1,amc rebel sst
17,8,302,140,3449,10.5,70,1,ford torino
15,8,429,198,4341,10,70,1,ford galaxie 500
14,8,454,220,4354,9,70,1,chevrolet impala
14,8,440,215,4312,8.5,70,1,plymouth fury iii
14,8,455,225,4425,10,70,1,pontiac catalina
15,8,390,190,3850,8.5,70,1,amc ambassador dpl
15,8,383,170,3563,10,70,1,dodge challenger se
14,8,340,160,3609,8,70,1,plymouth 'cuda 340
15,8,400,150,3761,9.5,70,1,chevrolet monte carlo
14,8,455,225,3086,10,70,1,chevrolet monte carlo
24,4,113,95,2372,15,70,3,toyota corona mark ii
22,6,198,95,2833,15.5,70,1,plymouth duster
18,6,199,97,2774,15.5,70,1,amc hornet
21,6,200,85,2587,16,70,1,ford maverick
27,4,97,88,2130,14.5,70,3,datsun pl510
26,4,97,46,1835,20.5,70,2,volkswagen 113i deluxe sedan
25,4,110,87,2672,17.5,70,2,peugeot 504
24,4,107,90,2430,14.5,70,2,audi 100 ls
25,4,104,95,2375,17.5,70,2,saab 99e
26,4,121,113,2234,12.5,70,2,bmw 2002
21,6,199,90,2648,15,70,1,amc gremlin
10,8,360,215,4615,14,70,1,ford f250
10,8,307,200,4376,15,70,1,chevy c20
11,8,318,210,4382,13.5,70,1,dodge d200
9,8,304,193,4732,18.5,70,1,hi 1200d
27,4,97,88,2130,14.5,71,3,datsun pl510
28,4,140,90,2264,15.5,71,1,chevrolet vega 2300
25,4,113,95,2228,14,71,3,toyota corona
19,6,232,100,2634,13,71,1,amc gremlin
16,6,225,105,3439,15.5,71,1,plymouth satellite custom
17,6,250,100,3329,15.5,71,1,chevrolet chevelle malibu
19,6,250,88,3302,15.5,71,1,ford torino 500
18,6,232,100,3288,15.5,71,1,amc matador
14,8,350,165,4209,12,71,1,chevrolet impala
14,8,400,175,4464,11.5,71,1,pontiac catalina brougham
14,8,351,153,4154,13.5,71,1,ford galaxie 500
14,8,318,150,4096,13,71,1,plymouth fury iii
12,8,383,180,4955,11.5,71,1,dodge monaco (sw)
13,8,400,170,4746,12,71,1,ford country squire (sw)
13,8,400,175,5140,12,71,1,pontiac safari (sw)
18,6,258,110,2962,13.5,71,1,amc hornet sportabout (sw)
22,4,140,72,2408,19,71,1,chevrolet vega (sw)
19,6,250,100,3282,15,71,1,pontiac firebird
18,6,250,88,3139,14.5,71,1,ford mustang
23,4,122,86,2220,14,71,1,mercury capri 2000
28,4,116,90,2123,14,71,2,opel 1900
30,4,79,70,2074,19.5,71,2,peugeot 304
30,4,88,76,2065,14.5,71,2,fiat 124b
31,4,71,65,1773,19,71,3,toyota corolla 1200
35,4,72,69,1613,18,71,3,datsun 1200
27,4,97,60,1834,19,71,2,volkswagen model 111
26,4,91,70,1955,20.5,71,1,plymouth cricket
24,4,113,95,2278,15.5,72,3,toyota corona hardtop
25,4,97.5,80,2126,17,72,1,dodge colt hardtop
23,4,97,54,2254,23.5,72,2,volkswagen type 3
20,4,140,90,2408,19.5,72,1,chevrolet vega
21,4,122,86,2226,16.5,72,1,ford pinto runabout
13,8,350,165,4274,12,72,1,chevrolet impala
14,8,400,175,4385,12,72,1,pontiac catalina
15,8,318,150,4135,13.5,72,1,plymouth fury iii
14,8,351,153,4129,13,72,1,ford galaxie 500
17,8,304,150,3672,11.5,72,1,amc ambassador sst
11,8,429,208,4633,11,72,1,mercury marquis
13,8,350,155,4502,13.5,72,1,chevrolet monte carlo
12,8,350,160,4456,13.5,72,1,oldsmobile delta 88 royale
13,8,400,190,4422,12.5,72,1,chrysler newport royal
19,3,70,97,2330,13.5,72,3,mazda rx2 coupe
15,8,304,150,3892,12.5,72,1,amc matador (sw)
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4) Calculate the Mean, Median, Standard Deviation and Variance of the data values provided.

Mean:	23.36938776	
Median:	22.45	
Standard Deviation:	7.863843358	
Variance:	61.84003236	

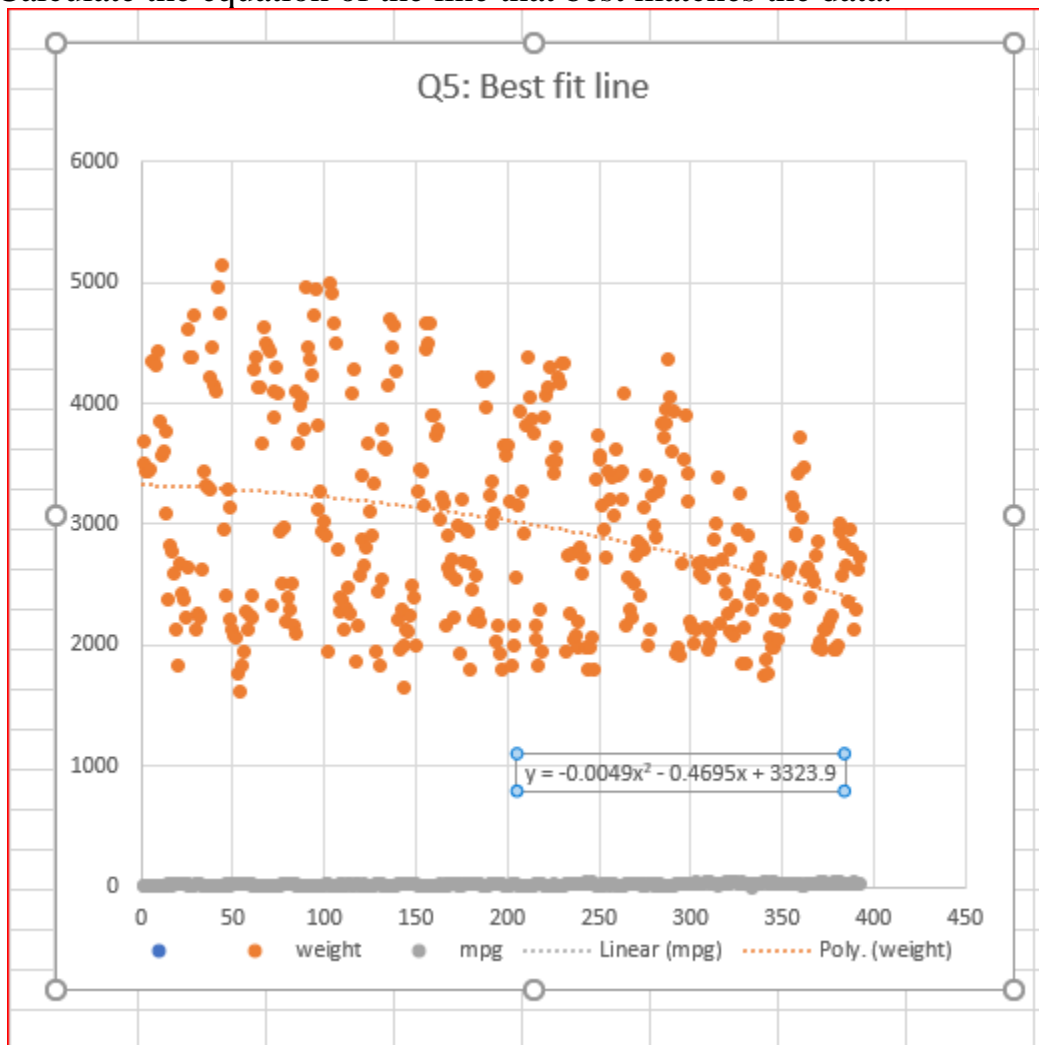
5) Use Excel's conditional formatting to highlight the top 10% of values.

21.5	pontiac lemans v6		
19.8	mercury zephyr 6		
22.3	ford fairmont 4		
20.2	amc concord dl 6		
20.6	dodge aspen 6		
17	chevrolet caprice classic		
17.6	ford ltd landau		
16.5	mercury grand marquis		
18.2	dodge st. regis		
16.9	buick estate wagon (sw)		
15.5	ford country squire (sw)		
19.2	chevrolet malibu classic (sw)		
18.5	chrysler lebaron town @ country (sw)		
31.9	vw rabbit custom		
34.1	maxda glc deluxe		
35.7	dodge colt hatchback custom		
27.4	amc spirit dl		
25.4	mercedes benz 300d		
23	cadillac eldorado		
27.2	peugeot 504		
23.9	oldsmobile cutlass salon brougham		
34.2	plymouth horizon		
34.5	plymouth horizon tc3		
31.8	datsum 210		
37.3	fiat strada custom		
28.4	buick skylark limited		
28.8	chevrolet citation		
26.8	oldsmobile omega brougham		
33.5	pontiac phoenix		
41.5	vw rabbit		
38.1	toyota corolla tercel		
32.1	chevrolet chevette		
37.2	datsum 310		
28	chevrolet citation		
26.4	ford fairmont		
24.3	amc concord		
19.1	dodge aspen		
34.3	audi 4000		
29.8	toyota corona liftback		
31.3	mazda 626		
37	datsum 510 hatchback		
32.2	toyota corolla		
46.6	mazda glc		
27.9	dodge colt		
40.8	datsum 210		
44.3	vw rabbit c (diesel)		
43.4	vw dasher (diesel)		
36.4	audi 5000s (diesel)		
30	mercedes-benz 240d		
44.6	honda civic 1500 gl		
33.8	subaru dl		
29.8	vokswagen rabbit		
32.7	datsum 280-zx		
23.7	mazda rx-7 gs		
35	triumph tr7 coupe		
2.4	honda accord		

6) Determine the min, max, fourth largest and fifth largest values.

Min:	2.4	
Max:	46.6	
Fourth Largest:	44	
Fifth Largest:	43.4	

7) Calculate the equation of the line that best matches the data.



- 8) Use Excel's What-If Analysis to determine the price change you would need to make a profit of \$1,000.
- 9) Forecast sales with a 90% confidence interval.
- 10) Create a Pivot Table that shows sales by salesperson per month