ASSIGNMENT - 1:

DATA VISUALIZATION AND ANALYSIS USING IBM COGNOS

1. LINE CHART - R & D SPENT VS PROFIT:

VISUALIZATION:



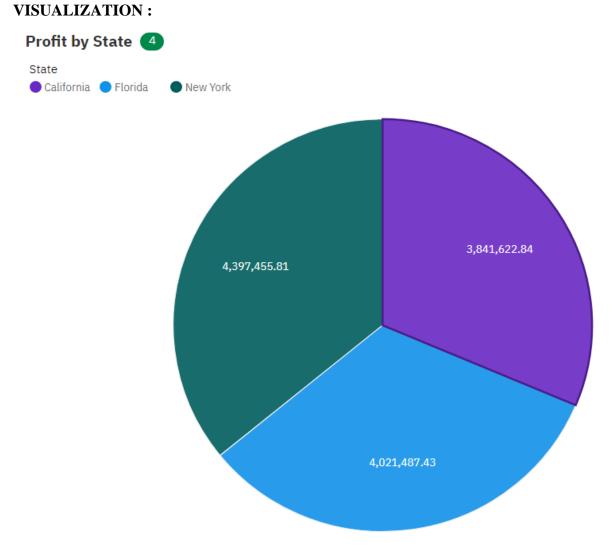
ANALYSIS:

Across all **r&d spends**, the sum of **Profit** is over 11 million.

For **Profit**, the most significant values of **R&D Spend** are 100671.96, 20229.59, 93863.75, 91992.39, and 119943.24, whose respective **Profit** values add up to nearly 2.1 million, or 18.8 % of the total.

Profit ranges from almost 70 thousand, when **R&D Spend** is 15505.73, to nearly 433 thousand, when **R&D Spend** is 100671.96.

2. PIE CHART DISPLAYING PROFIT EARNED BY DIFFERENT STATES:



ANALYSIS:

Across all **states**, the sum of **Profit** is over 12 million.

Profit ranges from over 3.8 million, in California, to almost 4.4 million, in New York.

3. TABLE FORMAT:

VISUALIZATION:

Profit for State and Marketing Spend 5

Profit	California	Florida	New York	Summary
0	85,119.46	(no value)	316,900.54	402,020
1,903.93	(no value)	(no value)	129,852.16	129,852.16
28,334.72	130,400.66	(no value)	(no value)	130,400.66
35,534.17	(no value)	(no value)	139,517.96	139,517.96
45,173.06	29,362.8	(no value)	(no value)	29,362.8
46,085.25	194,855.68	(no value)	(no value)	194,855.68
88,218.23	(no value)	(no value)	194,967.12	194,967.12
91,131.24	(no value)	99,937.59	99,937.59	199,875.18
107,138.38	(no value)	(no value)	202,009.28	202,009.28
118,148.2	(no value)	206,564.76	(no value)	206,564.76
127,716.82	312,245.02	(no value)	(no value)	312,245.02
134,050.07	(no value)	211,467.08	(no value)	211,467.08
137,962.62	214,808.68	(no value)	(no value)	214,808.68
140,574.81	(no value)	(no value)	217,104.08	217,104.08

ANALYSIS:

For **Profit**, the most significant values of **Marketing Spend** are 249744.55 and 249839.44, whose respective **Profit** values add up to nearly 858 thousand, or 7 % of the total.

Across all **states** and **marketing spends**, the sum of **Profit** is over 12 million.

For **Profit**, the most significant value of **State** is New York, whose respective **Profit** values add up to nearly 4.4 million, or 35.9 % of the total.

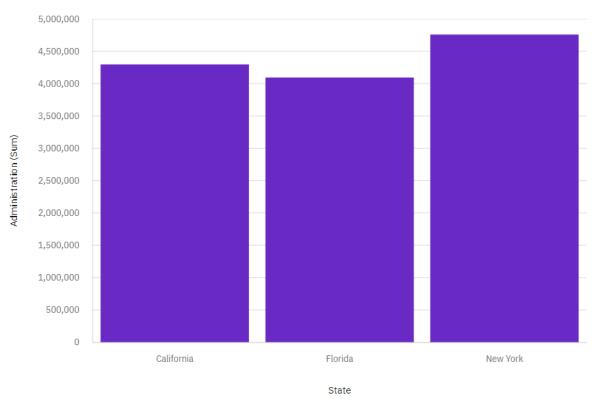
The summed values of **Profit** range from over 29 thousand to almost 433 thousand.

4. BAR CHART:

VISUALIZATION:

Administration by State





ANALYSIS:

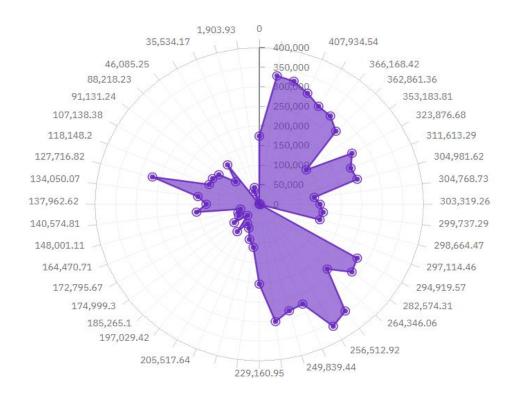
Across all **states**, the sum of **Administration** is over 13 million.

Administration ranges from almost 4.1 million, in Florida, to nearly 4.8 million, in New York.

5. RADAR CHART:

VISUALIZATION:

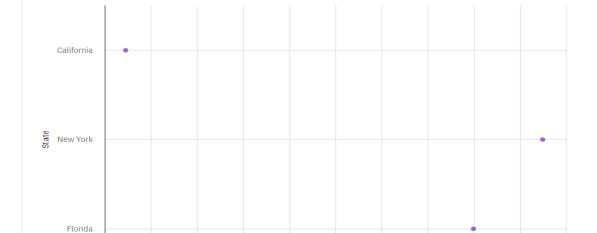
R&D Spend by Marketing Spend



6. POINT GRAPH:

VISUALIZATION:

R&D Spend by State



2,400,000 2,450,000 2,500,000 2,550,000 2,650,000 2,700,000 2,750,000 2,800,000 2,850,000 2,900,000 R&D Spend (Sum)

7. BOX PLOT:

VISUALIZATION:

