

# SSN College of Engineering

## Domain - Data Analytics

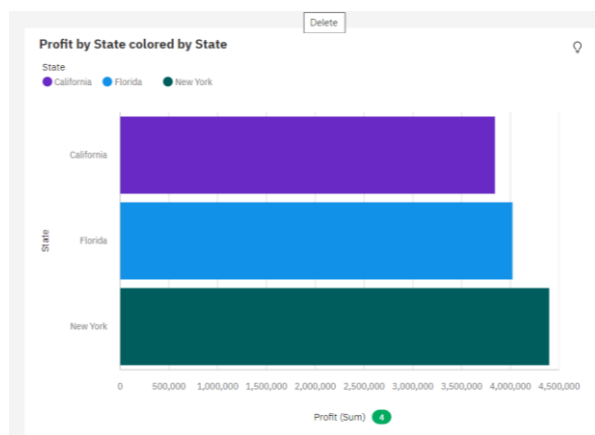
### Assignment 1- Profit from the 50 start up's dataset

**Name:**Reethika S

**Roll Number:** SSNCE195002090

**Branch:** Information Technology

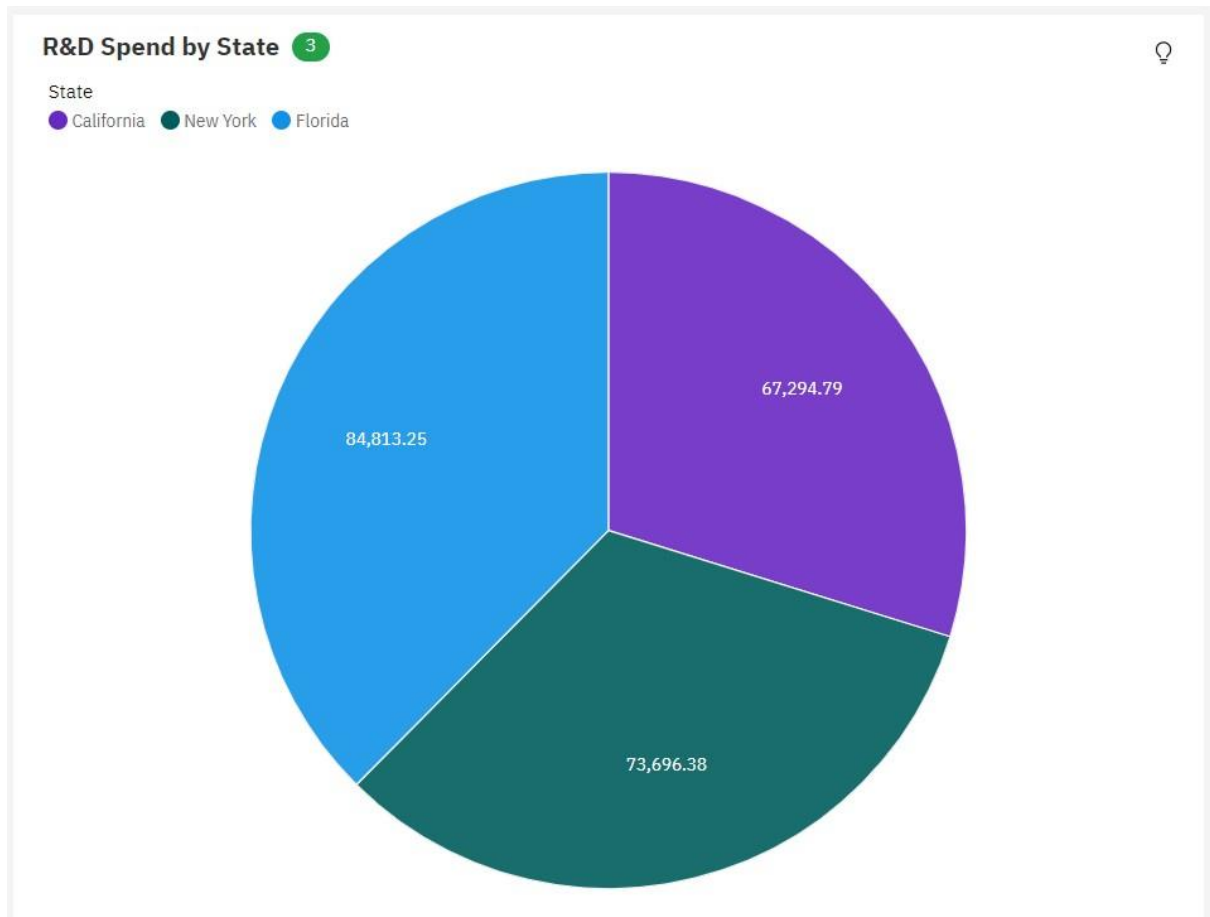
#### Average Profit by State coloured by State (Bar graph):



### Details:

- 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.
- Across all **states** and **states**, the sum of **Profit** is over 12 million.
- The summed values of **Profit** range from over 3.8 million to nearly 4.4 million.

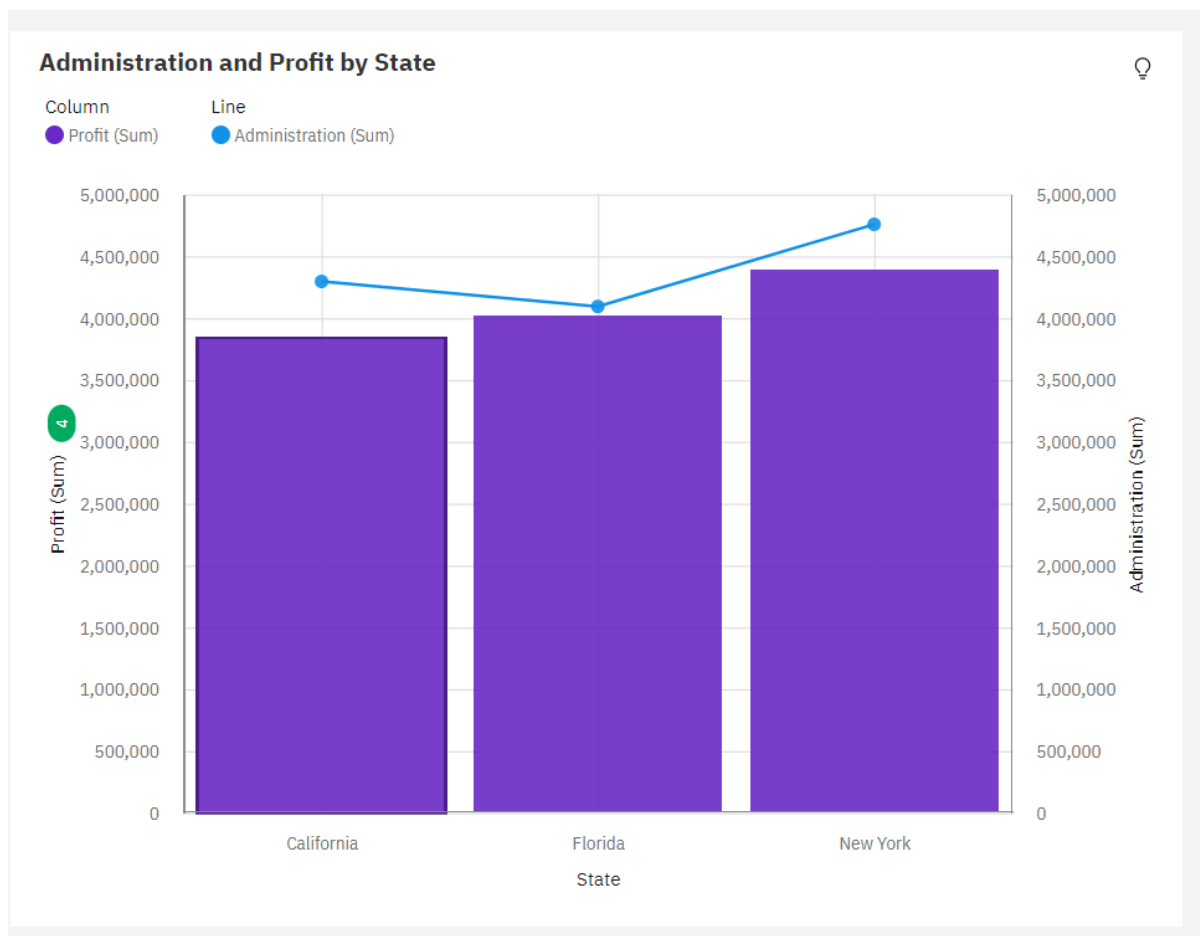
### Average R&D Spend by State (Pie chart):



### Details:

- Over all states, the average of R&D Spend is nearly 75 thousand.
- The average values of R&D Spend range from over 67 thousand, occurring in California, to almost 85 thousand, in Florida.
- The most common values of State are New York (36.1 %) and California (33.3 %), together occurring 75 times, which is 69.4 % of the total.

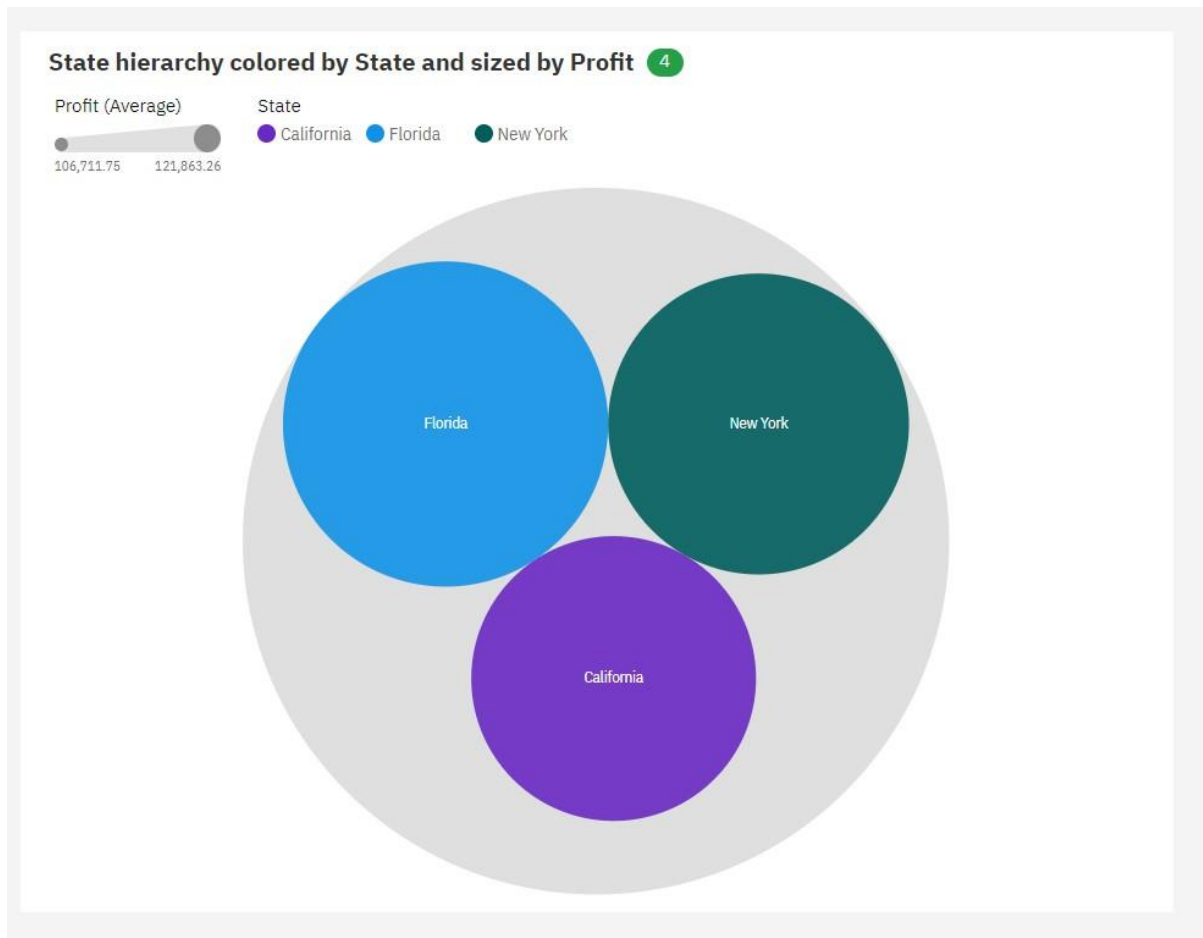
## Administration and Profit by State(Line and column chart):



### Details:

- 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.
- 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.

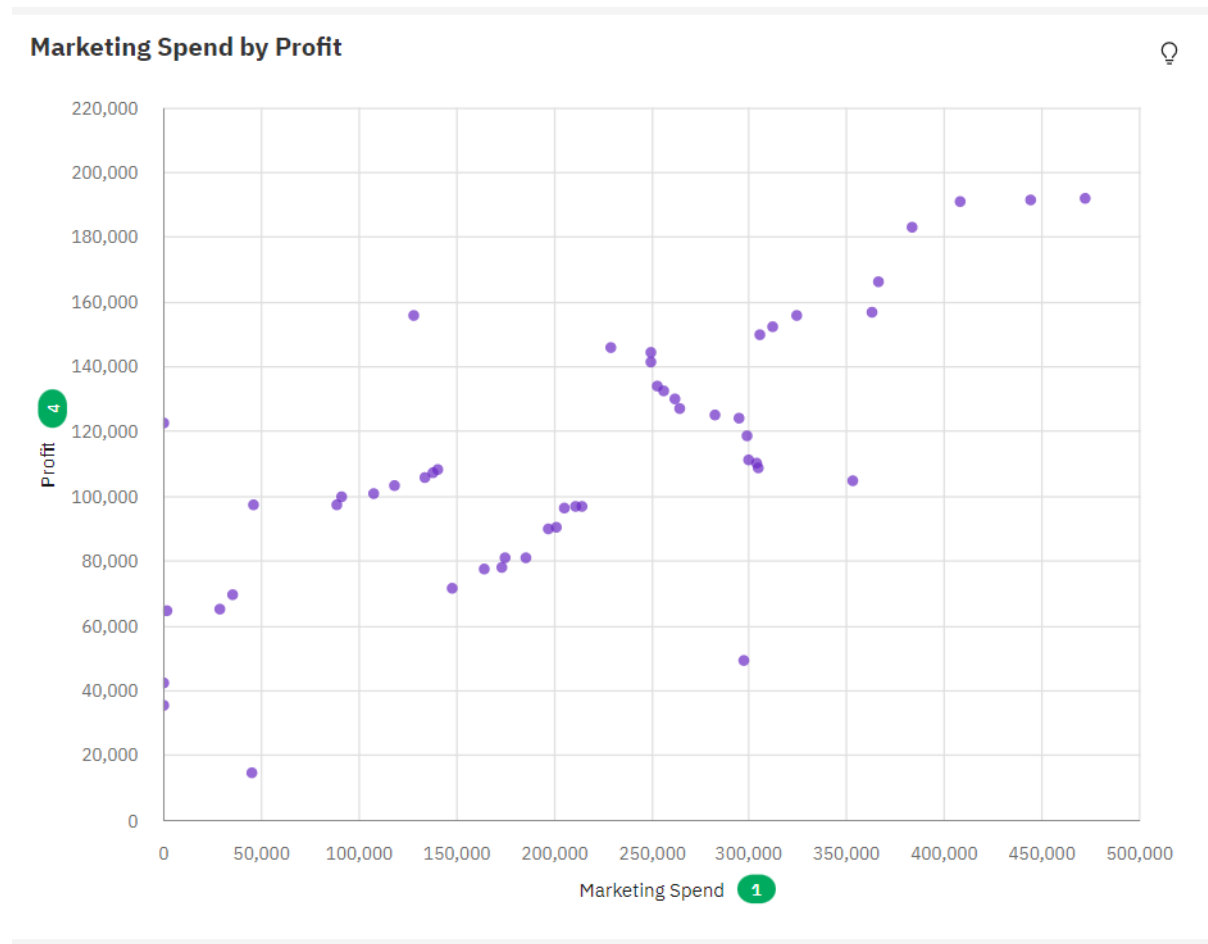
### State hierarchy coloured by State and sized by Profit (Hierarchy bubble):



#### Details:

- The most common values of State are New York (36.1 %) and California (33.3 %), together occurring 75 times, which is 69.4 % of the total.
- Over all states and states, the average of Profit is almost 114 thousand.
- The average values of Profit range from nearly 107 thousand to almost 122 thousand.

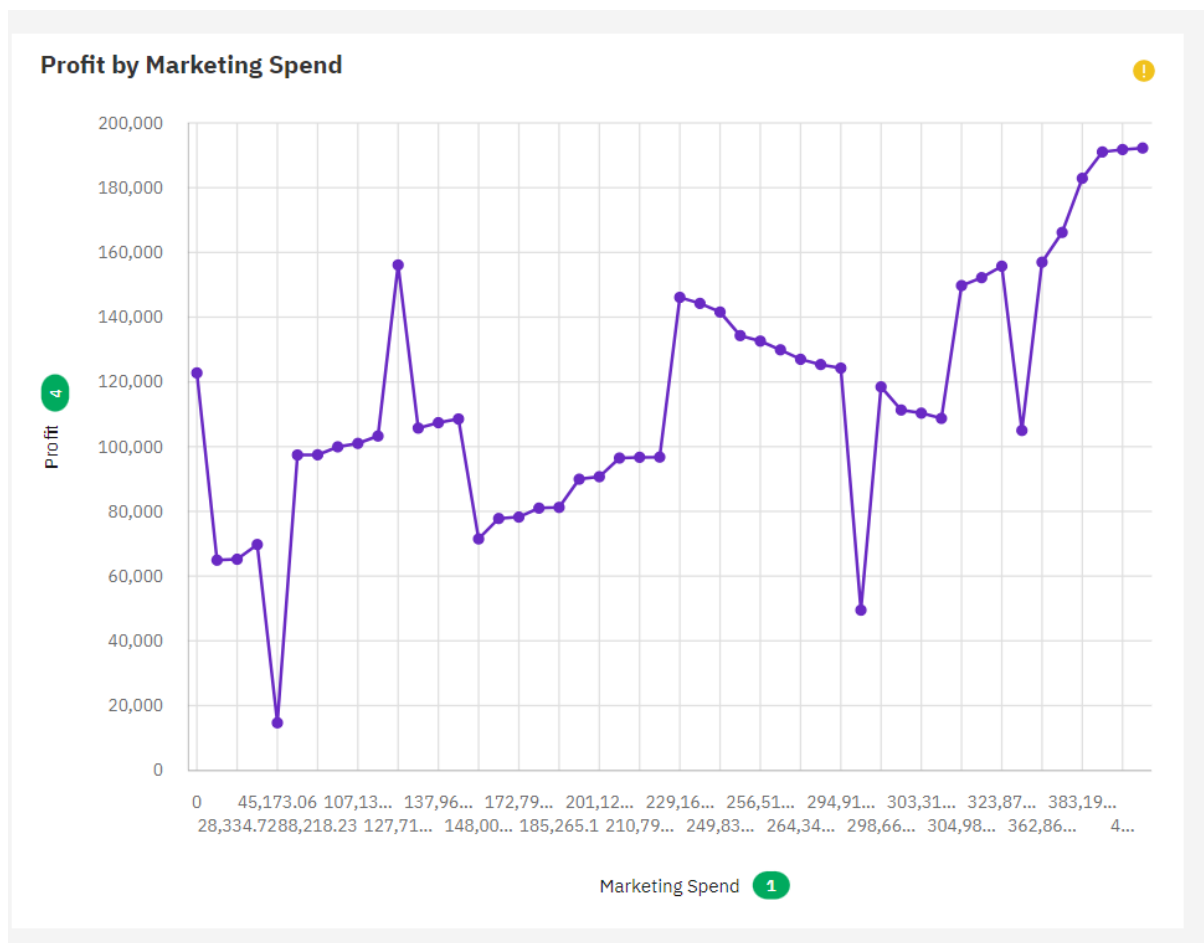
## Marketing Spend by Profit (Scatter Plot) :



### Details:

- The total number of results for Profit, across all marketing spends, is 108.
- The total of Profit is over 5.6 million.
- The average of Profit is nearly 52 thousand.
- Profit is unusually low when Marketing Spend is 297,114.
- Profit and Marketing Spend have a medium positive linear association, being  $\text{Profit} = 60299 + 0.2476 * \text{Marketing Spend}$

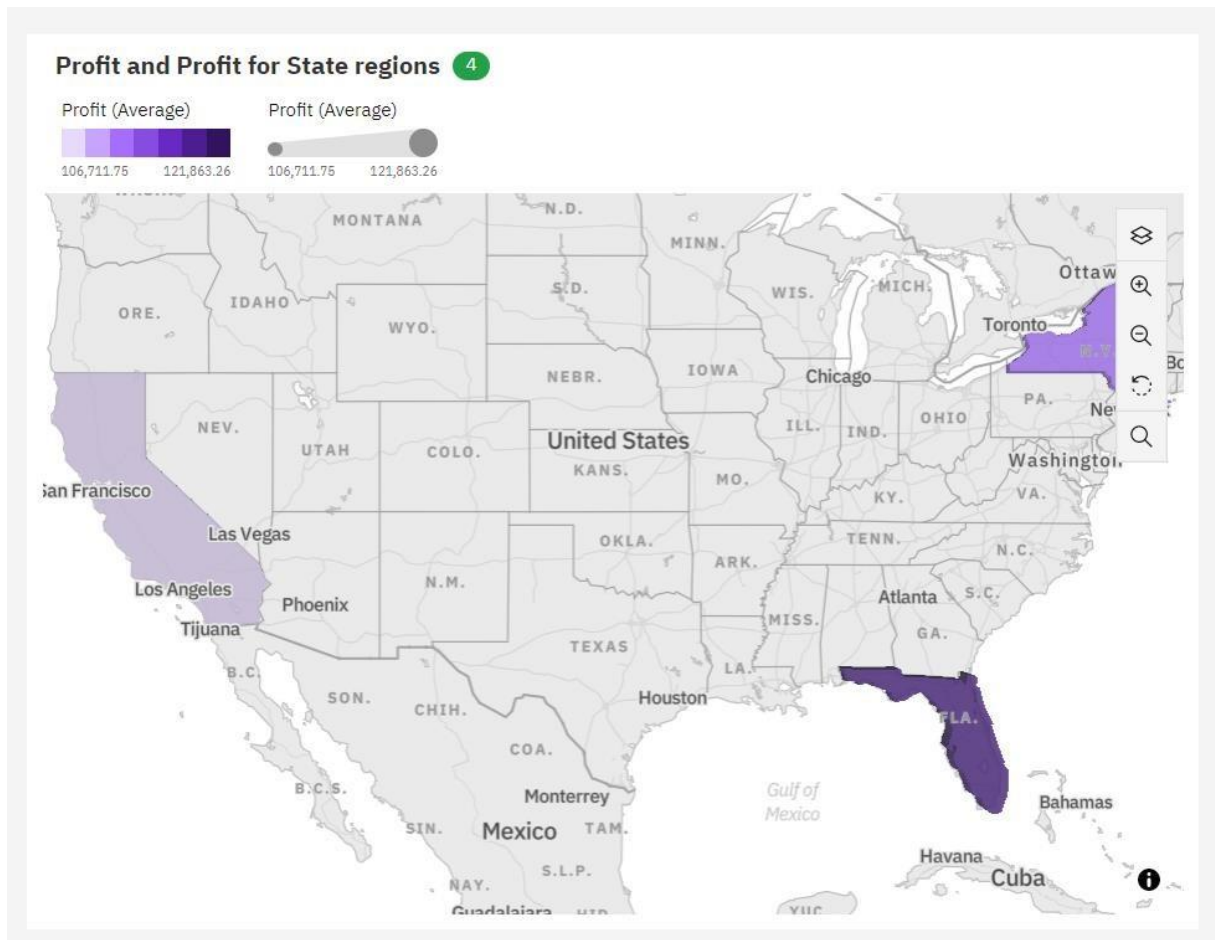
## Profit by Marketing Spend (Line Chart):



### Details:

- The total number of results for Profit, across all marketing spends, is 108.
- Across all marketing spends, the sum of Profit is over 5.6 million.
- Over all marketing spends, the average of Profit is almost 52 thousand.
- The most common value of Marketing Spend is 0, occurring 6 times, which is 5.6 % of the total.
- The values of Profit range from nearly fifteen thousand, occurring when Marketing Spend is 45173.06, to over 192 thousand, when Marketing Spend is 471784.1.

### Total Profit state wise (Map):



### Details:

- The most common values of State are New York (36.1 %) and California (33.3 %), together occurring 75 times, which is 69.4 % of the total.
- The total number of results for Profit, across all states, is 108.
- Over all states, the average of Profit is nearly 114 thousand.
- The average values of Profit range from almost 107 thousand, occurring in California, to nearly 122 thousand, in Florida.