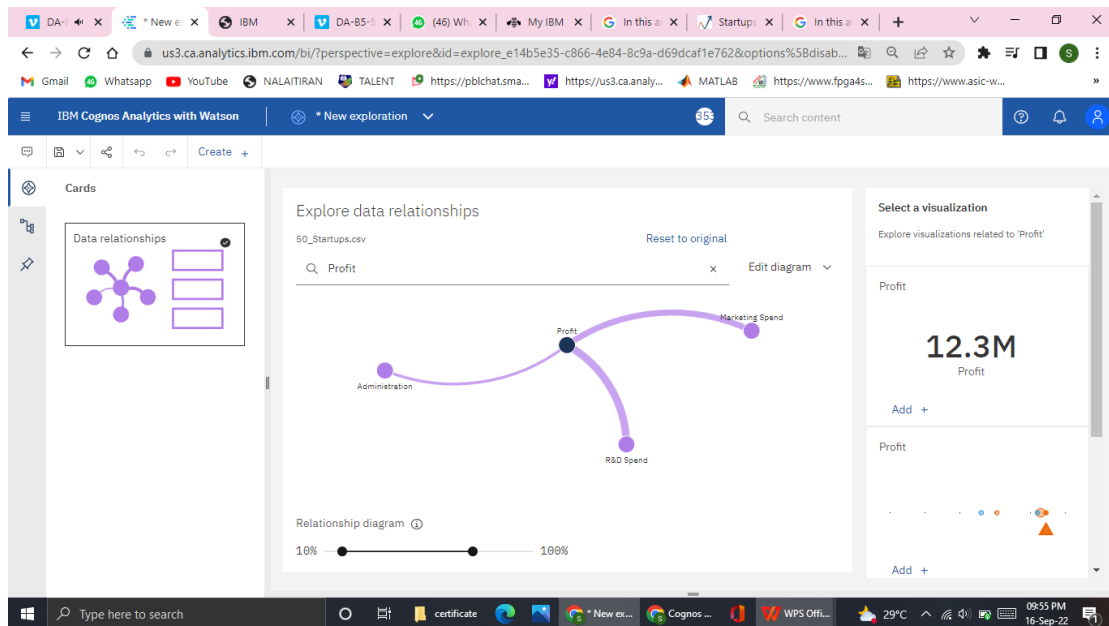


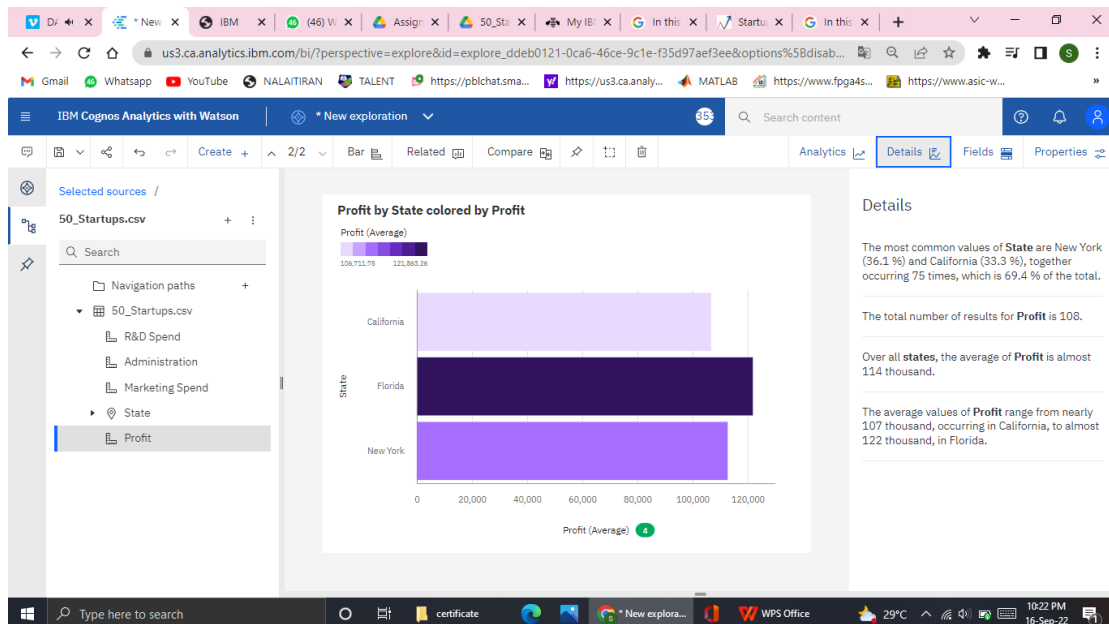
<b>NAME</b>	<b>: VINOTHINI P</b>
<b>TEAM ID</b>	<b>: PNT2022TMID00675</b>
<b>ROLL NO</b>	<b>: 211419104306</b>
<b>BATCH NO</b>	<b>: B4-4M6E</b>
<b>PROJECT</b>	<b>: Airlines Data Analytics for Aviation Industry</b>
<b>ASSIGNMENT NO</b>	<b>: 01</b>

## DATA EXPLORATION:



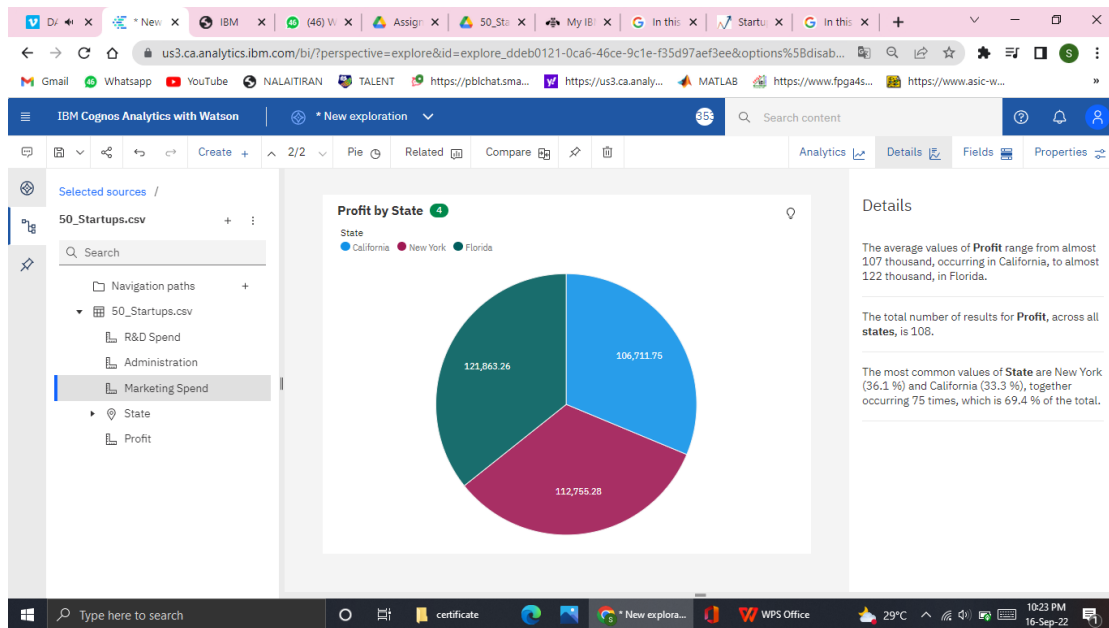
## DATA VISUALIZATION

### Profit by State colored by Profit(AVERAGE) - BAR GRAPH



Florida has nearly 122000 profit average.

## Profit by State(PIE CHART)



Newyork State has high profit rate when compared to all other states.

## Profit for State and Marketing Spend (CROSS TABLE)

**Profit for State and Marketing Spend**

Profit	California	Florida	New York	Summary
0	42,559.73	(no value)	79,225.14	67,003.33
1,903.93	(no value)	(no value)	64,926.08	64,926.08
28,334.72	65,200.33	(no value)	(no value)	65,200.33
35,534.17	(no value)	(no value)	69,758.98	69,758.98
45,173.06	14,681.4	(no value)	(no value)	14,681.4
46,085.25	97,427.84	(no value)	(no value)	97,427.84
88,218.23	(no value)	(no value)	97,483.56	97,483.56
91,131.24	(no value)	99,937.59	99,937.59	99,937.59
107,138.38	(no value)	(no value)	101,004.64	101,004.64
118,148.2	(no value)	103,282.38	(no value)	103,282.38
127,716.82	156,122.51	(no value)	(no value)	156,122.51

**Details**

The most common value of **State** is New York, occurring 19 times, which is 36.5 % of the total.

The most common values of **Marketing Spend** are 91131.24 (3.8 %), 0.0 (3.8 %), 210797.67 (3.8 %), and 164470.71 (3.8 %), together occurring 8 times, which is 15.4 % of the total.

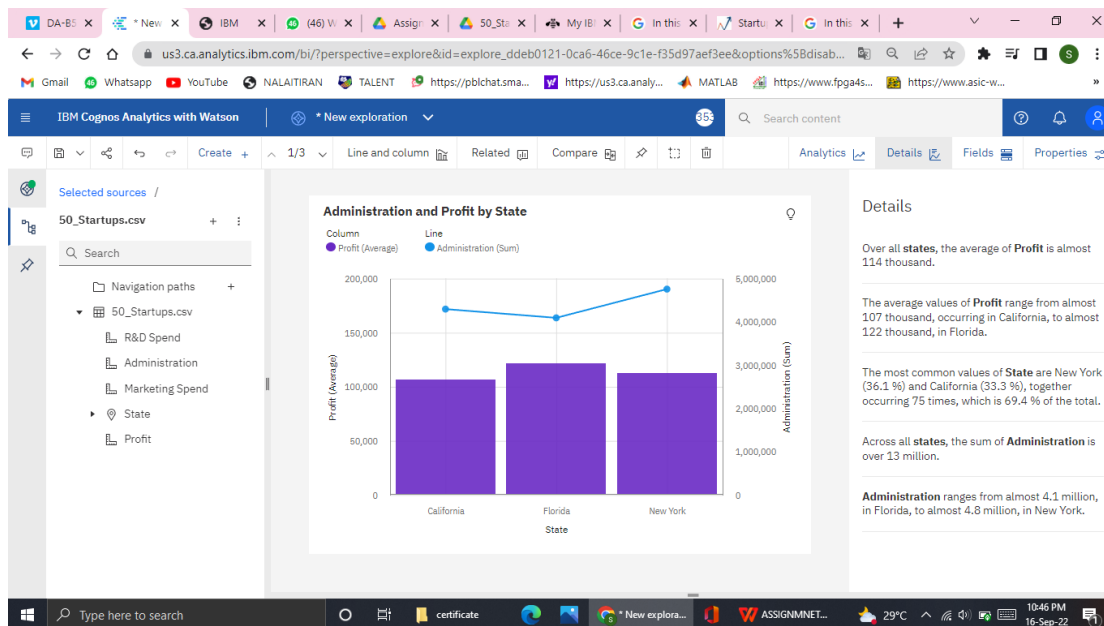
**Marketing Spend** strongly affects **Profit** (89%).

Across all states and marketing spends, the average of **Profit** is over 111 thousand.

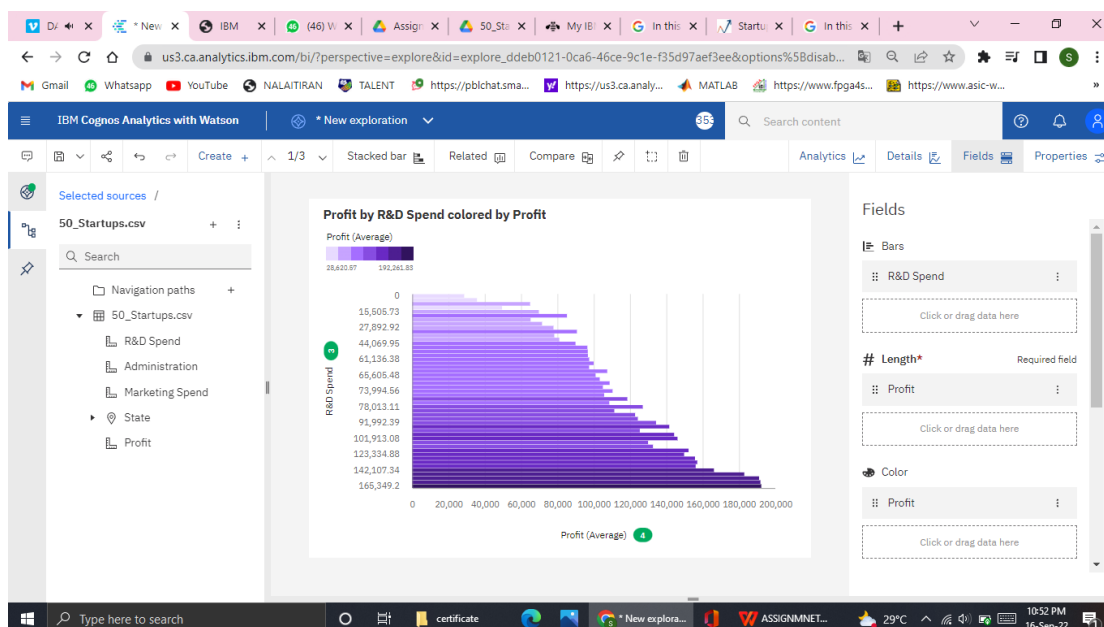
The average values of **Profit** range from nearly fifteen thousand to over 192 thousand.

Marketing Spend strongly affects Profit

## Administration and Profit by State ( Line and Column)



## Profit by R&D Spend colored by Profit ( STACKED BAR)



The screenshot displays the IBM Cognos Analytics interface. At the top, there's a navigation bar with the title 'IBM Cognos Analytics with Watson'. Below it, a sidebar on the left shows a tree view of data sources, with '50\_Startups.csv' selected. The main area features a line chart titled 'Profit by State and Administration'. The chart's y-axis is labeled 'Profit (Average)' and ranges from 0 to 200,000. The x-axis is labeled 'State - Administration' and lists various state-administration pairs. The chart shows a fluctuating purple line representing profit. To the right of the chart, a 'Details' panel provides summary statistics: 'The total number of results for R&D Spend, across all state - administrations, is 108.' and 'Across all state - administrations, the average of R&D Spend is over 54 thousand.' Below this, it lists common values for 'State - Administration' and provides the total number of results for 'Profit'.