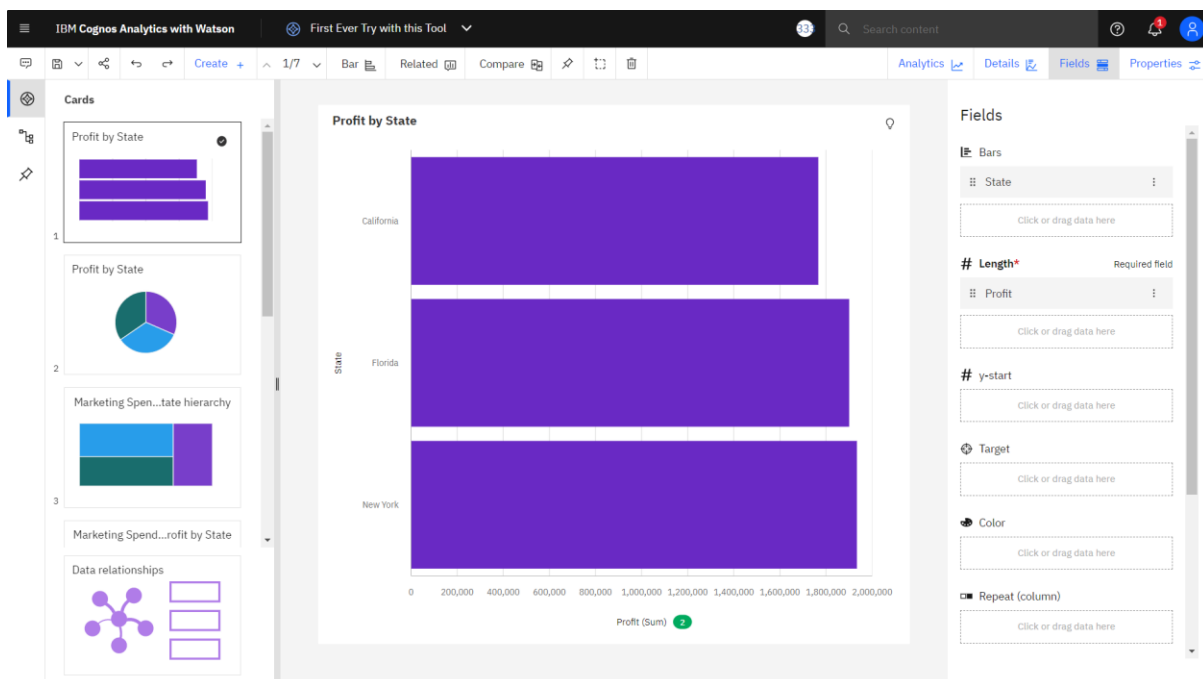# IBM – Data Analytics

Assignment - 1

Name	Ragul M GA
Roll Number	917719IT073

Challenge:

Upload the dataset to Cognos Analytics, prepare the data, explore and create interactive dashboard.
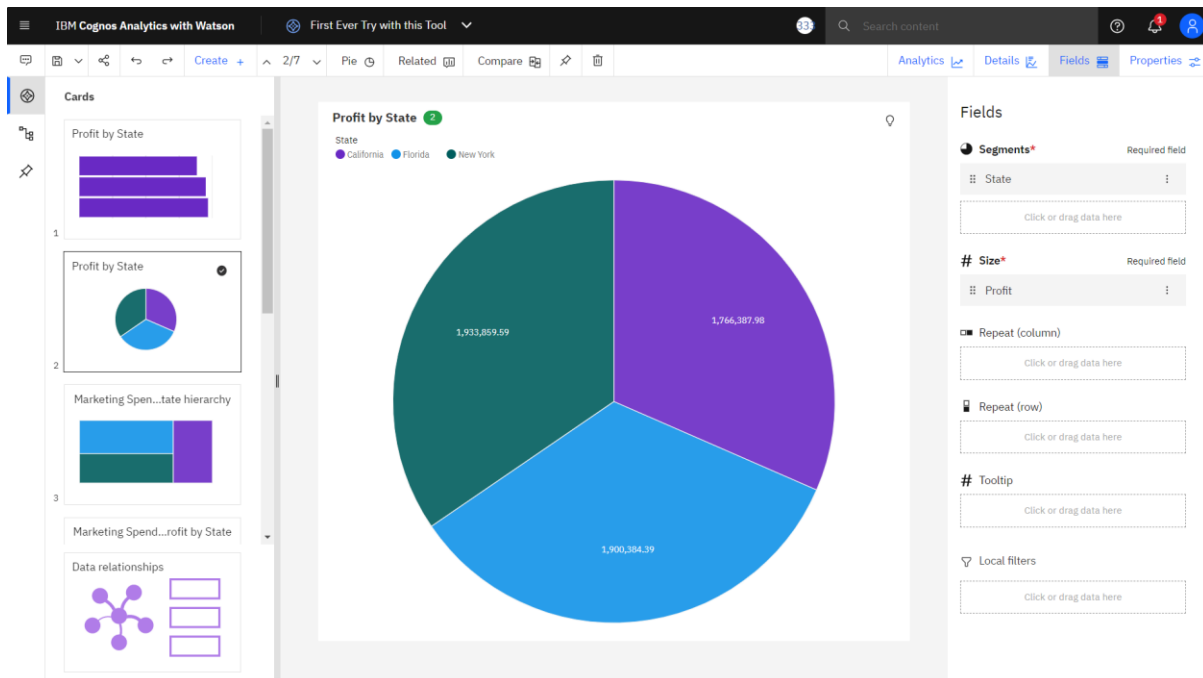
1) Profit by State (Bar):

Inference:

• Across all **states,** the sum of **Profit** is over 5.6 million.
• For **Profit**, the most significant values of **State** are New York and Florida, whose respective **Profit** values add up to over 3.8 million, or 68.5 % of the total.
• **Profit** ranges from nearly 1.8 million, in California, to over 1.9 million, in New York.

2) Profit by State (Pie):

Inference:

• Across all **states**, the sum of **Profit** is over 5.6 million.
• For **Profit**, the most significant values of **State** are New York and Florida, whose respective **Profit** values add up to over 3.8 million, or 68.5 % of the total.
• **Profit** ranges from nearly 1.8 million, in California, to over 1.9 million, in New York.
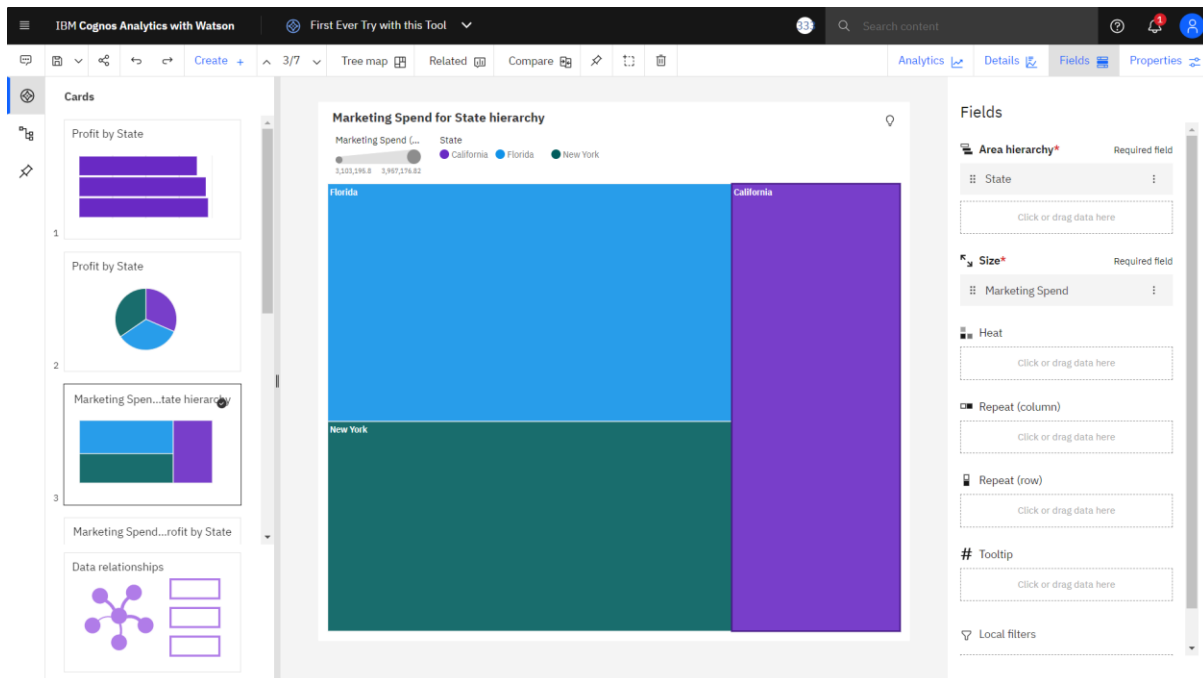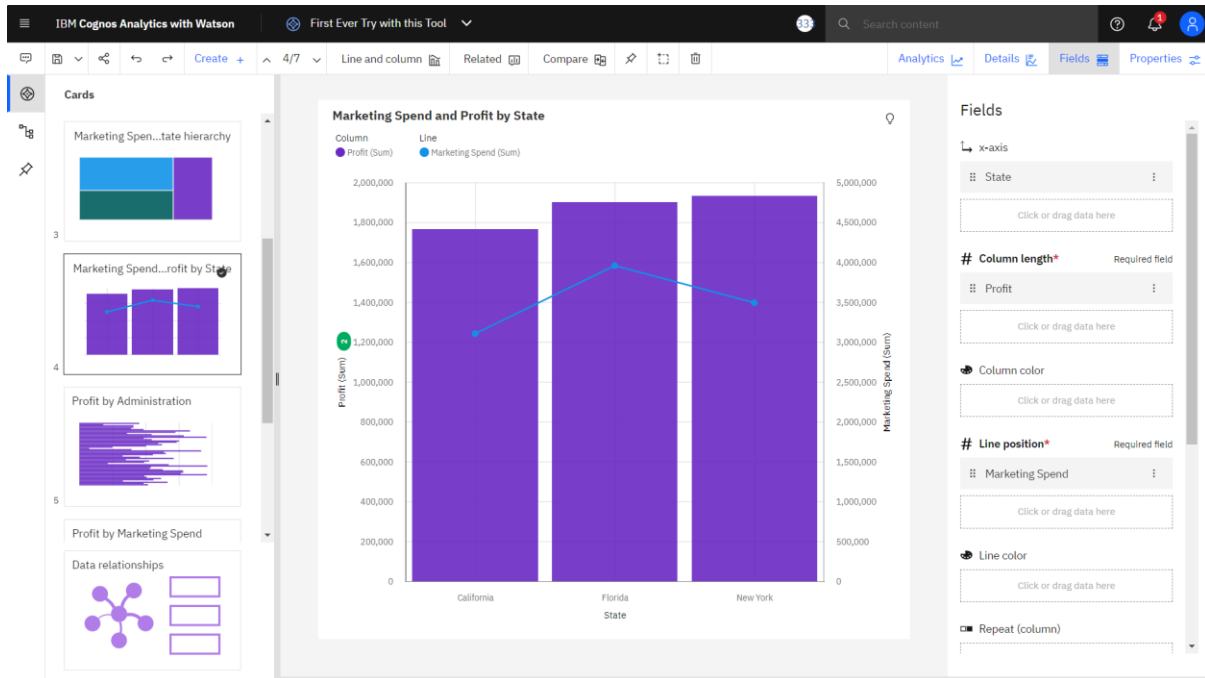
3) Marketing Spend for State Hierarchy (Tree Map):

Inference:

• Over all **states**, the sum of **Marketing Spend** is nearly 11 million.
• **Marketing Spend** ranges from over 3.1 million, in California, to almost 4.0 million, in Florida.

4) Marketing Spend and Profit by State (Line and Column):

Inference:

• Across all **states**, the sum of **Profit** is over 5.6 million.

• For **Profit**, the most significant values of **State** are New York and Florida, whose respective **Profit** values add up to over 3.8 million, or 68.5 % of the total.

• **Profit** ranges from nearly 1.8 million, in California, to over 1.9 million, in New York.

• Over all **states**, the sum of **Marketing Spend** is nearly 11 million.

• **Marketing Spend** ranges from over 3.1 million, in California, to nearly 4.0 million, in Florida.
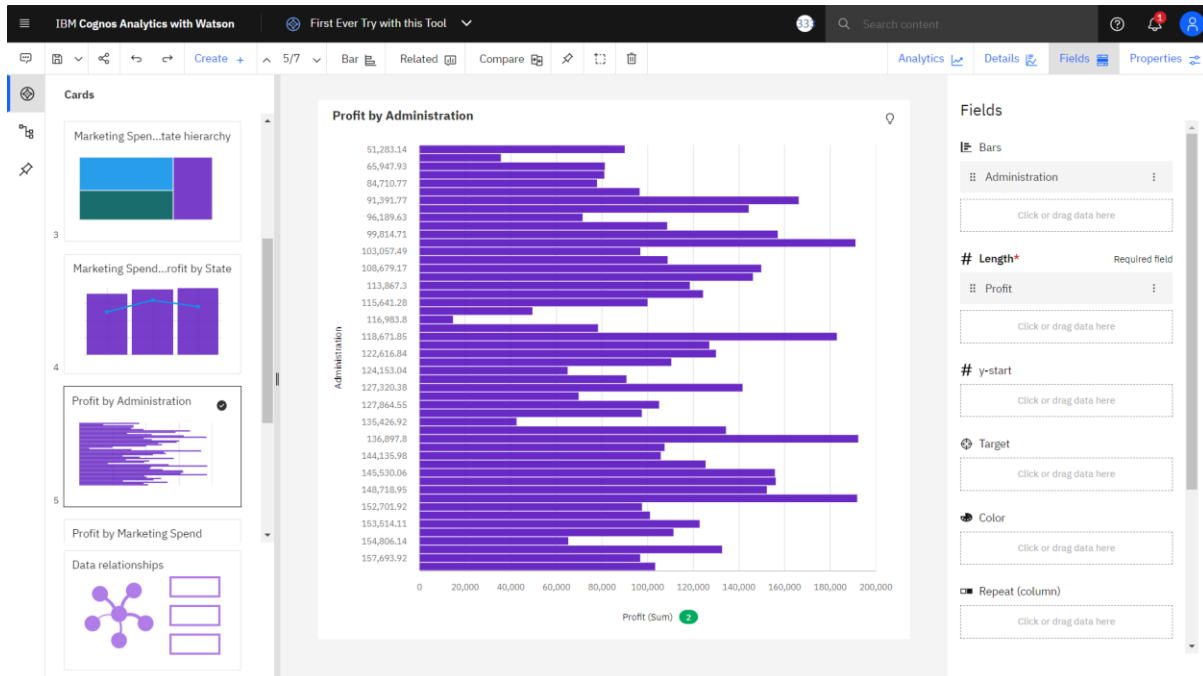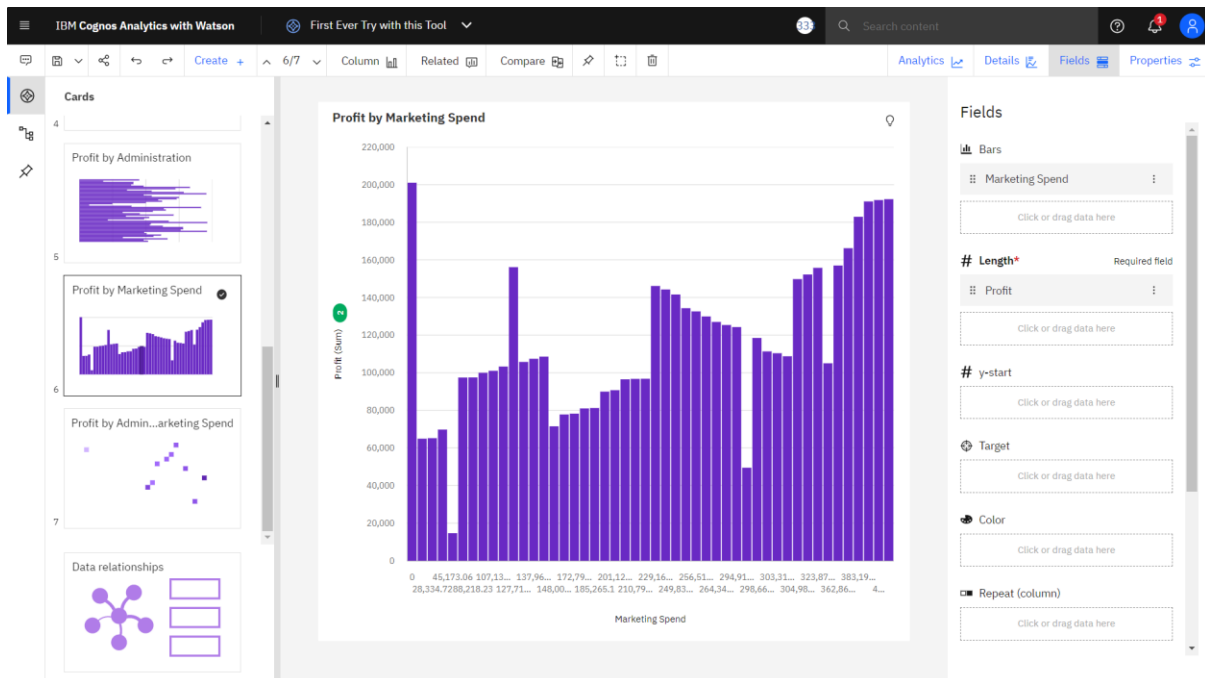
5) Profit by Administration (Bar):

Inference:

• Across all **administrations**, the sum of **Profit** is over 5.6 million.
• For **Profit**, the most significant values
of **Administration** are 136897.8, 151377.59, 101145.55, and 118671.85, whose
respective **Profit** values add up to over 758 thousand, or 13.5 % of the total.
• **Profit** ranges from nearly fifteen thousand, when **Administration** is 116983.8, to over 192
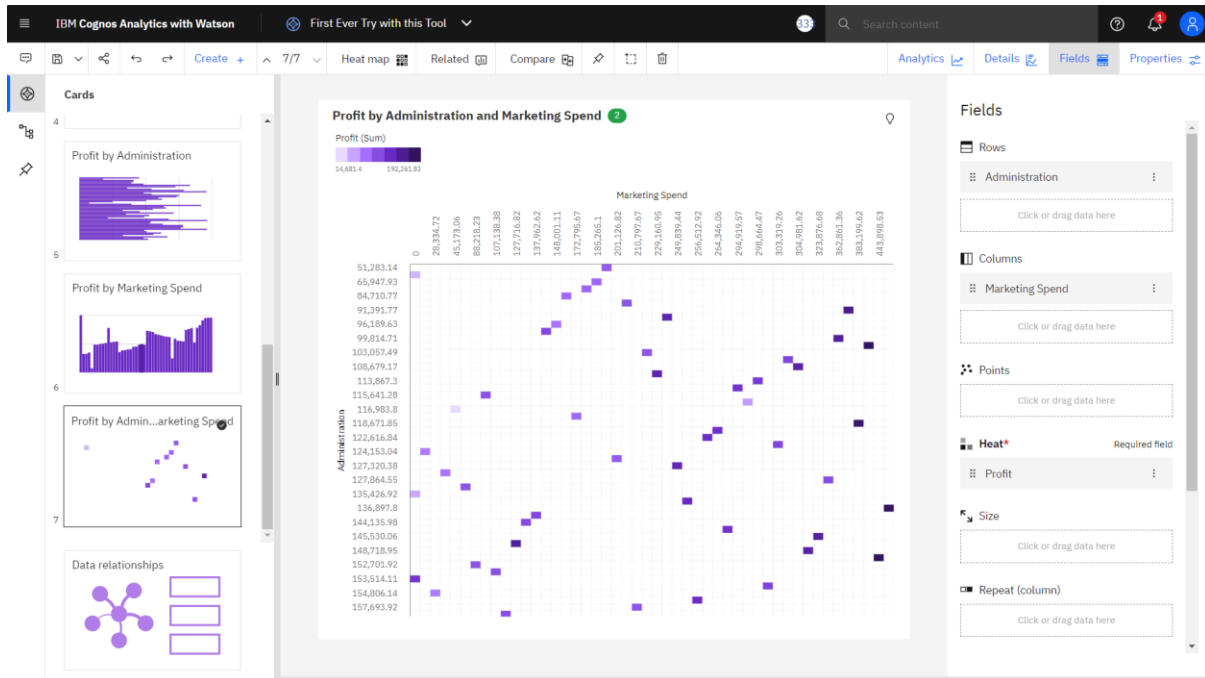thousand, when **Administration** is 136897.8.

6) Profit by Marketing Spend (Column):

Inference:

• Across all **marketing spends**, the sum of **Profit** is over 5.6 million.
• **Profit** ranges from nearly fifteen thousand, when **Marketing Spend** is 45173.06, to over 201 thousand, when **Marketing Spend** is 0.

7) Profit by Administration and Marketing Spend (Heat Map):

Inference:

• For **Profit**, the most significant values
of **Administration** are 136897.8, 151377.59, 101145.55, and 118671.85, whose
respective **Profit** values add up to over 758 thousand, or 13.5 % of the total.
• Across all **administrations** and **marketing spends**, the sum of **Profit** is over 5.6 million.
• For **Profit**, the most significant value of **Marketing Spend** is 0, whose respective **Profit** values
add up to over 201 thousand, or 3.6 % of the total.
• The summed values of **Profit** range from almost fifteen thousand to over 192 thousand.