

Assignment - 1

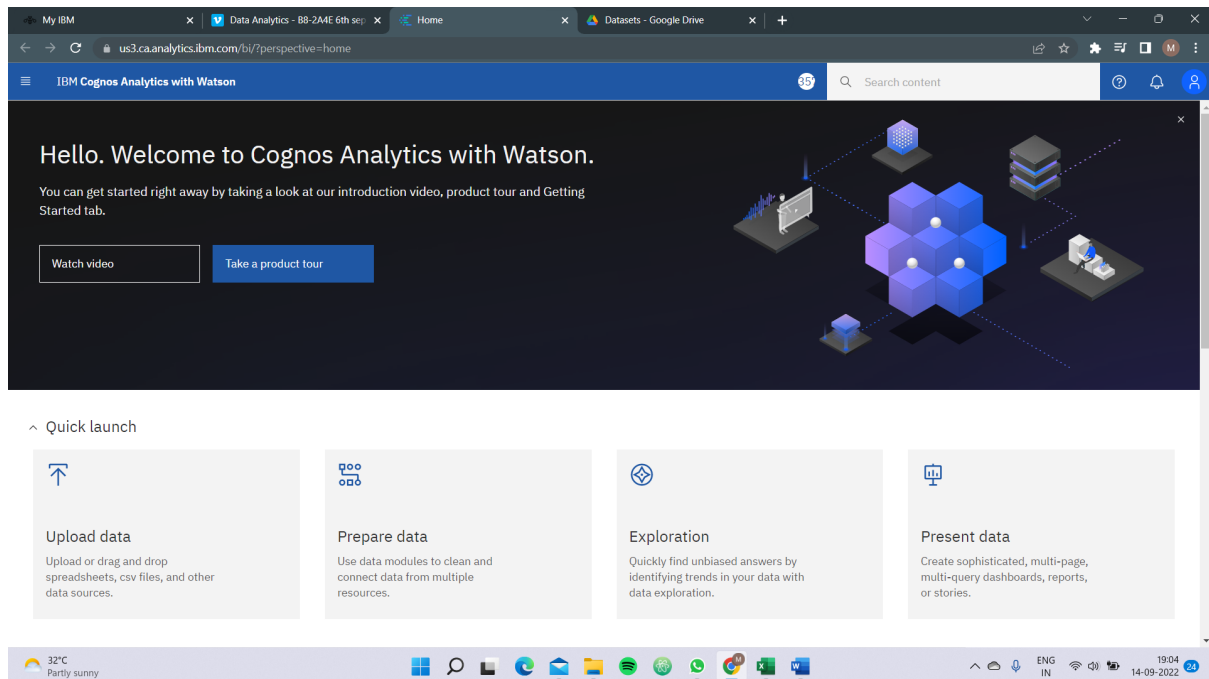
The case of 50 Start-up's

Dataset: [50-Startup-Dataset](#)

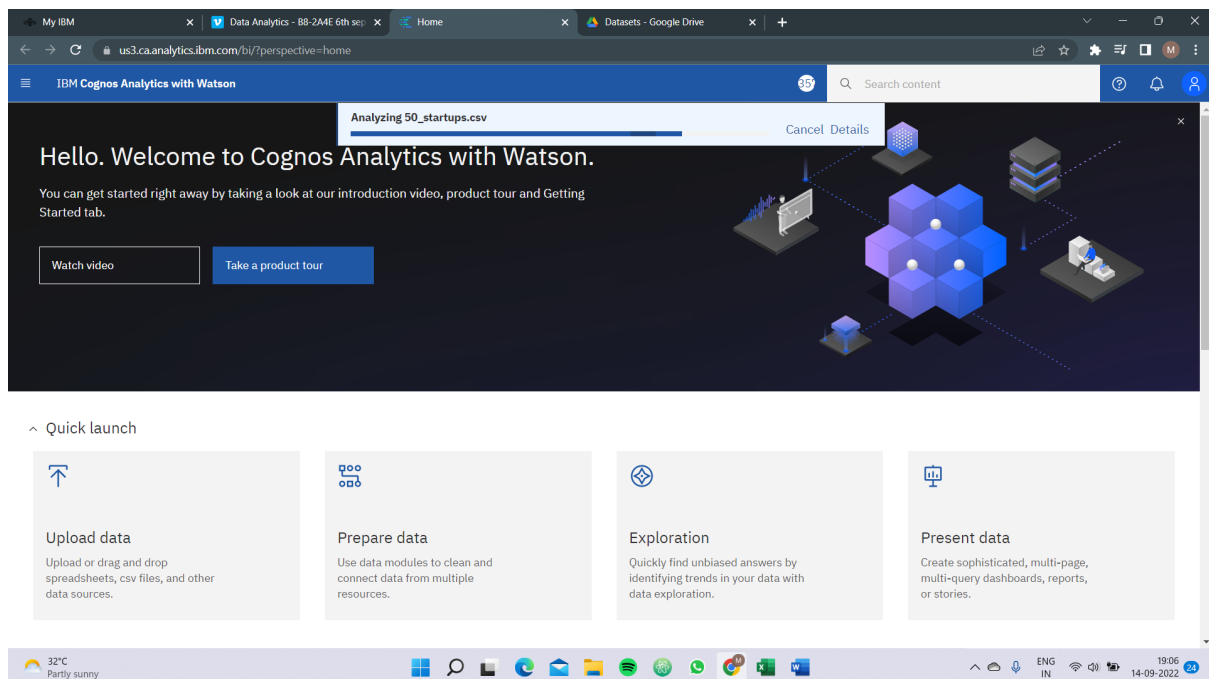
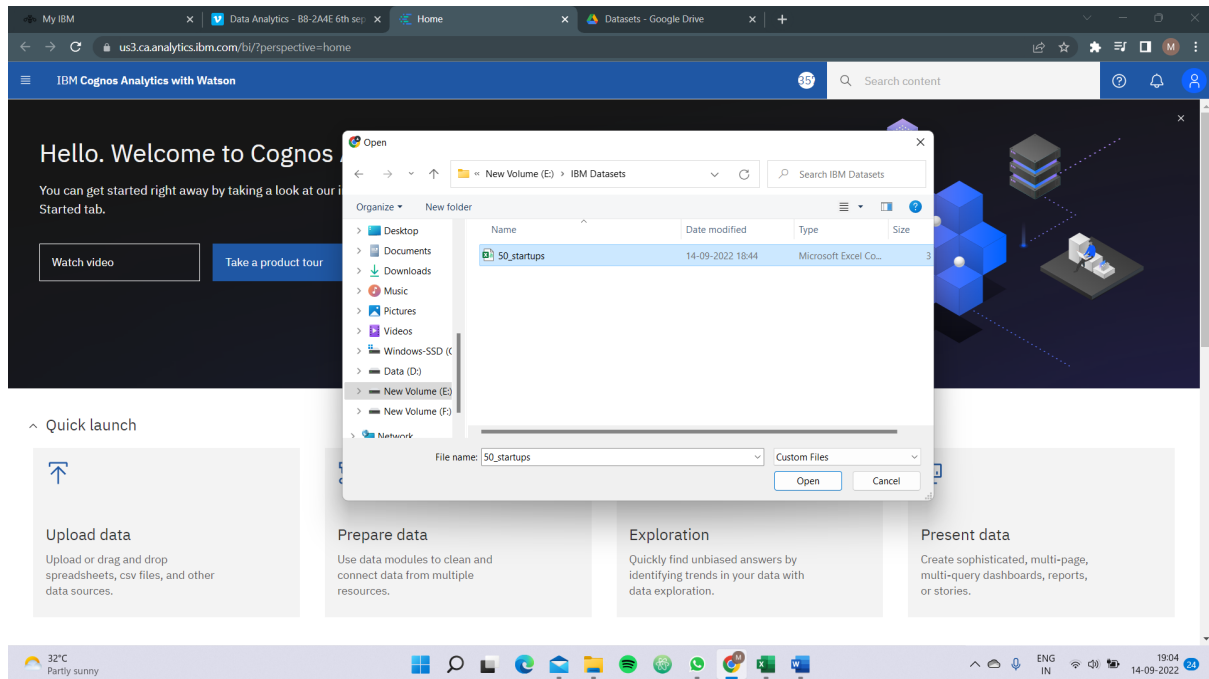
Login to the IBM Cognos Analytics

Select Launch from the product

Four main operations get displayed

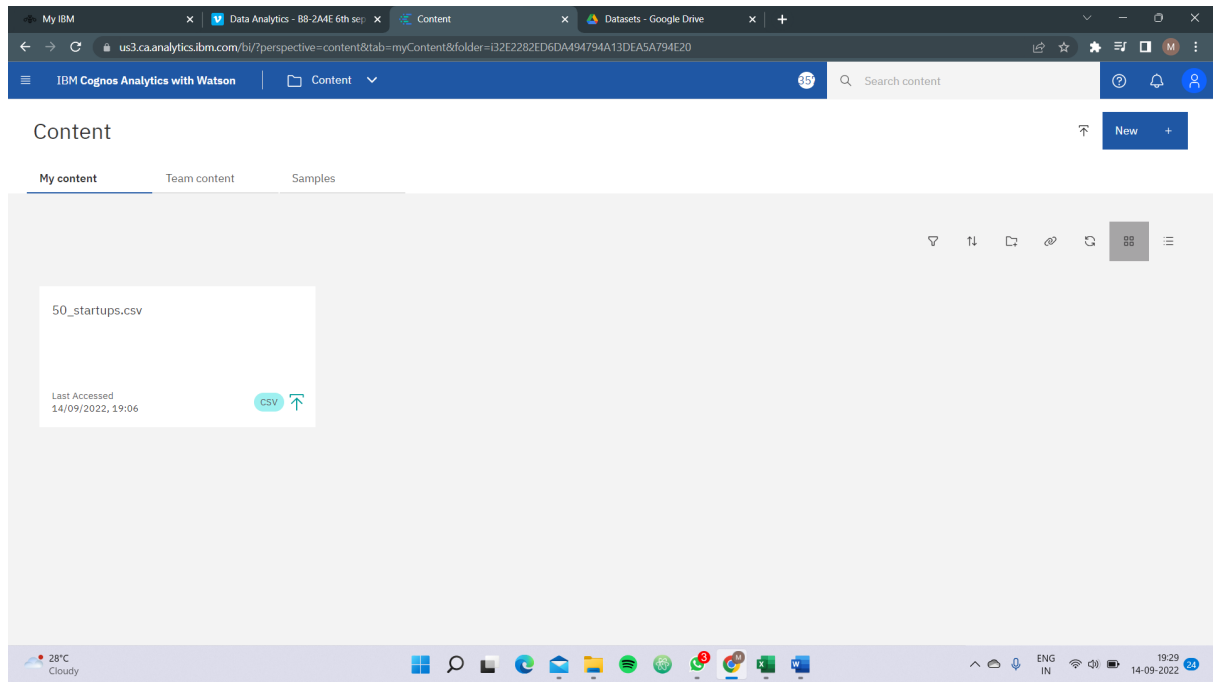


Upload the 50 startup dataset from the local system

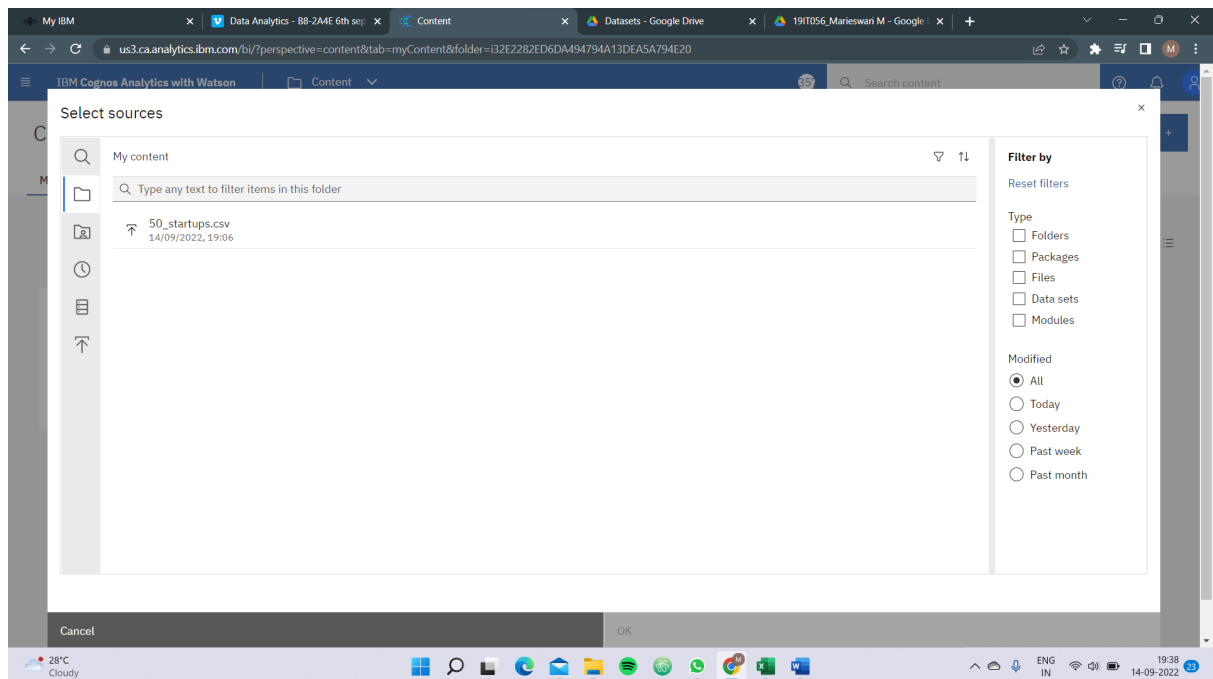


The uploaded dataset can be viewed in My Content page

Or you can also upload the dataset directly in my content page



Dataset get displayed with date and time



DATA PREPARATION

#- Unique values

Abc – Text values

Scale- Measure(numerical value)

Map mark – Map value

Click +new – data module – select 50 startup module

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a search bar and a list of fields: Row Id, R&D Spend, Administration, Marketing Spend, State, and Profit. The '50_startups.csv' module is selected. The main grid view displays the following data:

Row Id	R&D Spend	Administration	Marketing Spend	State	Profit
1	165349.2	136897.8	471784.1	New York	192261.83
2	162597.7	151377.59	443898.53	California	191792.06
3	153441.51	101145.55	407934.54	Florida	191050.39
4	144372.41	118671.85	383199.62	New York	182901.99
5	142107.34	91391.77	366168.42	Florida	166187.94
6	131876.9	99814.71	362861.36	New York	156991.12
7	134615.46	147198.87	127716.82	California	156122.51
8	130298.13	145530.06	323876.68	Florida	155752.6
9	120542.52	148718.95	311613.29	New York	152211.77
10	123334.88	108679.17	304981.62	California	149759.96
11	101913.08	110594.11	229160.95	Florida	146121.95
12	100671.96	91790.61	249744.55	California	144259.4
13	93863.75	127320.38	249839.44	Florida	141585.52
14	91992.39	135495.07	252664.93	California	134307.35

Clean the data for attribute state:-

Replace Florida with null value

The screenshot shows the 'Clean - State' dialog box in the IBM Cognos Analytics interface. The dialog has the following sections:

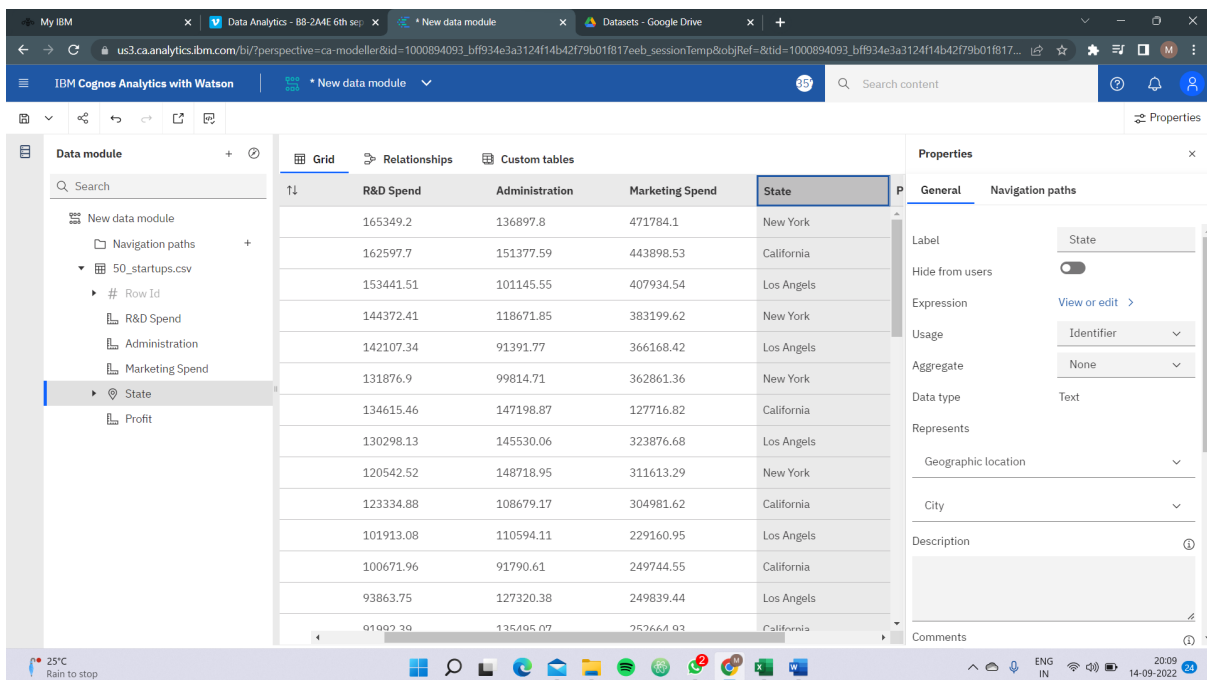
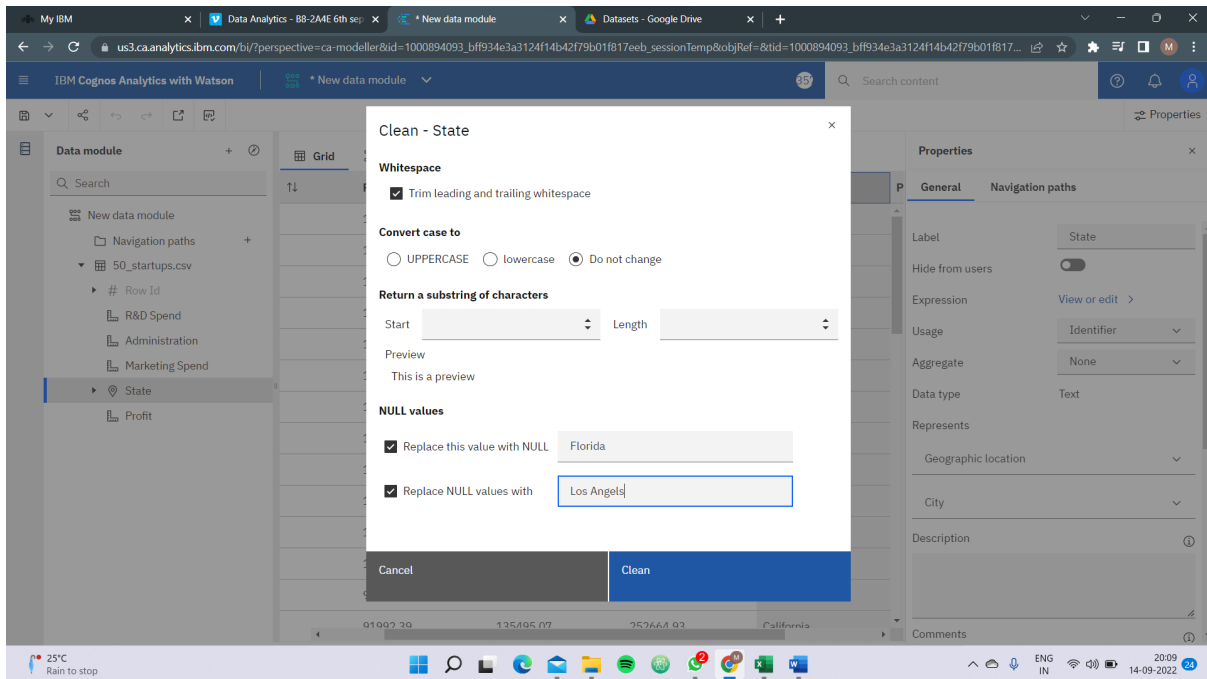
- Whitespace:** ☒ Trim leading and trailing whitespace
- Convert case to:** ☐ UPPERCASE ☐ lowercase ☒ Do not change
- Return a substring of characters:** Start: [] Length: []
- Preview:** This is a preview
- NULL values:**
 - ☒ Replace this value with NULL: [Florida]
 - ☐ Replace NULL values with: [Empty string]

The 'Clean' button is highlighted in blue at the bottom right of the dialog.

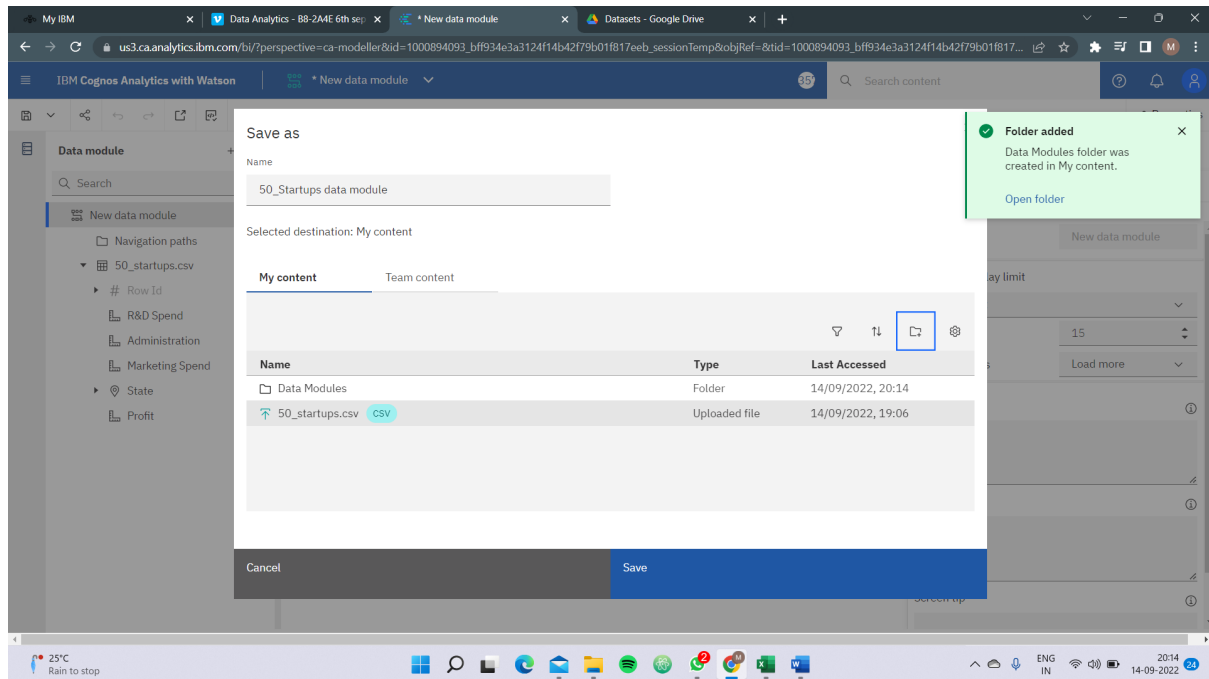
The screenshot displays the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a tree structure with 'New data module' at the top, followed by 'Navigation paths', '50_startups.csv', and a list of fields: '# Row Id', 'R&D Spend', 'Administration', 'Marketing Spend', 'State', and 'Profit'. The 'State' field is selected. The main area shows a table with columns: 'R&D Spend', 'Administration', 'Marketing Spend', and 'State'. The 'State' column is highlighted. The right-hand 'Properties' panel is open, showing the 'General' tab for the 'State' field. It includes options for 'Label' (State), 'Hide from users' (toggle), 'Expression' (View or edit), 'Usage' (Identifier), 'Aggregate' (None), 'Data type' (Text), 'Represents' (Geographic location), 'City' (dropdown), 'Description' (text area), and 'Comments' (text area).

R&D Spend	Administration	Marketing Spend	State
165349.2	136897.8	471784.1	New York
162597.7	151377.59	443898.53	California
153441.51	101145.55	407934.54	Null
144372.41	118671.85	383199.62	New York
142107.34	91391.77	366168.42	Null
131876.9	99814.71	362861.36	New York
134615.46	147198.87	127716.82	California
130298.13	145530.06	323876.68	Null
120542.52	148718.95	311613.29	New York
123334.88	108679.17	304981.62	California
101913.08	110594.11	229160.95	Null
100671.96	91790.61	249744.55	California
93863.75	127320.38	249839.44	Null
91997.29	135495.07	252666.93	California

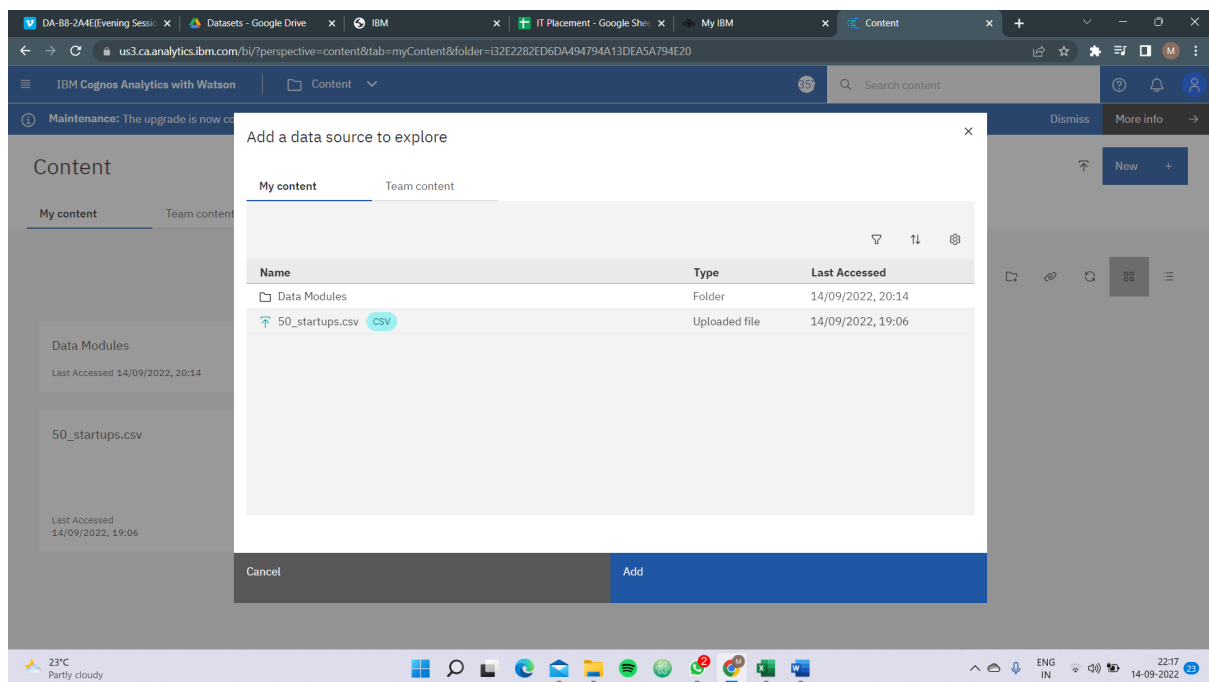
Again replacing Null with Los Angeles



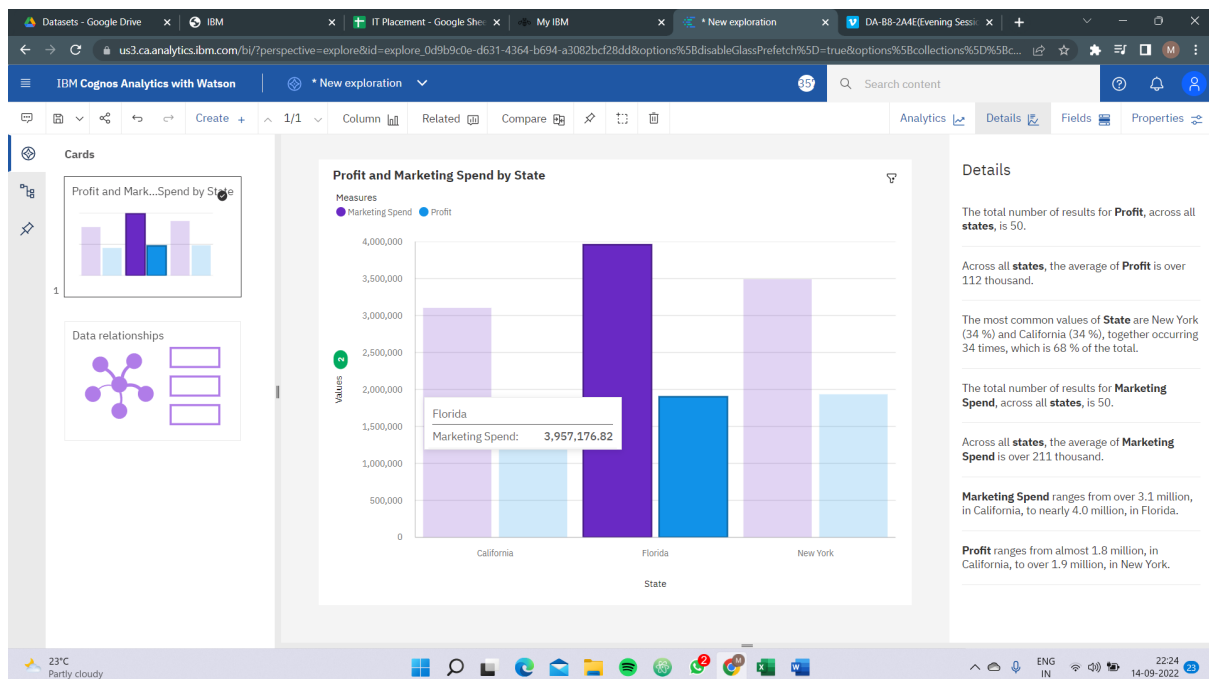
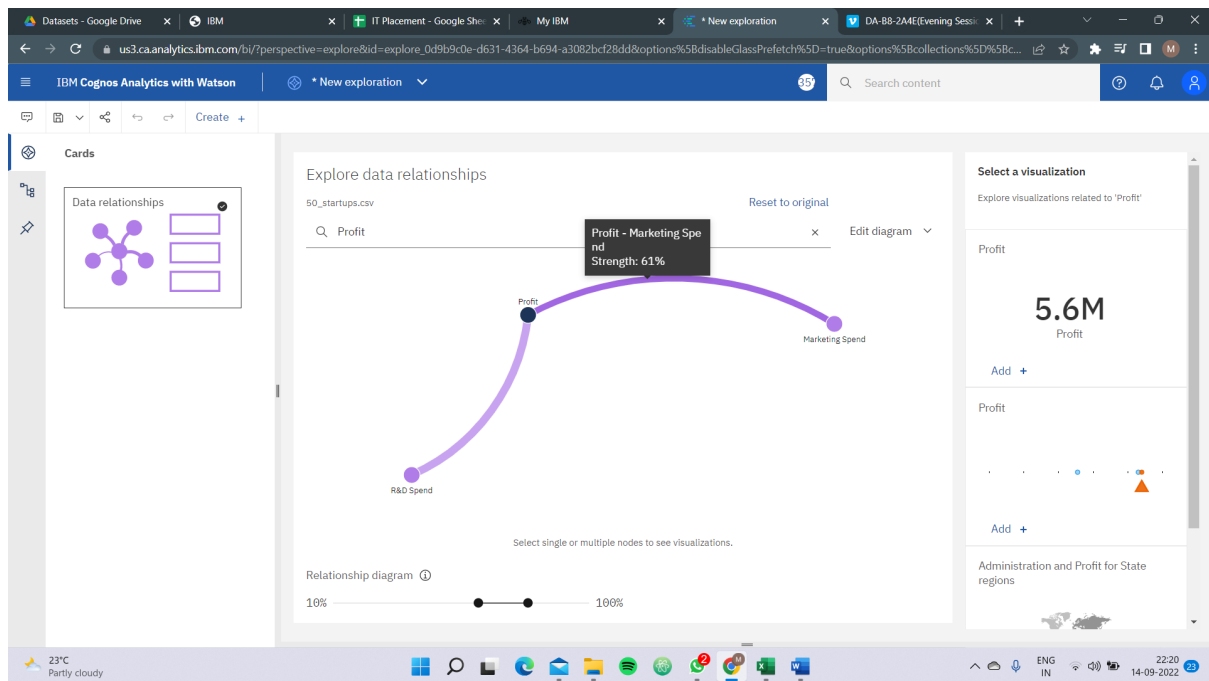
To save the module in newly created folder



DATA EXPLORATION



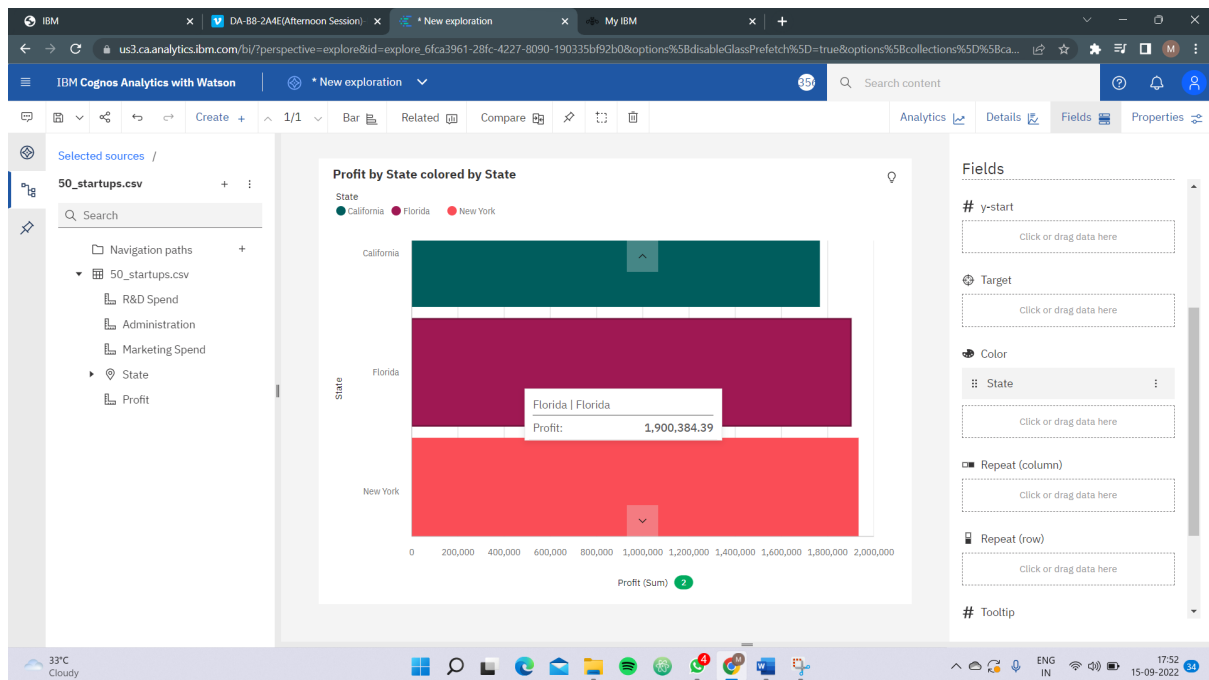
Exploring recommended attribute profit



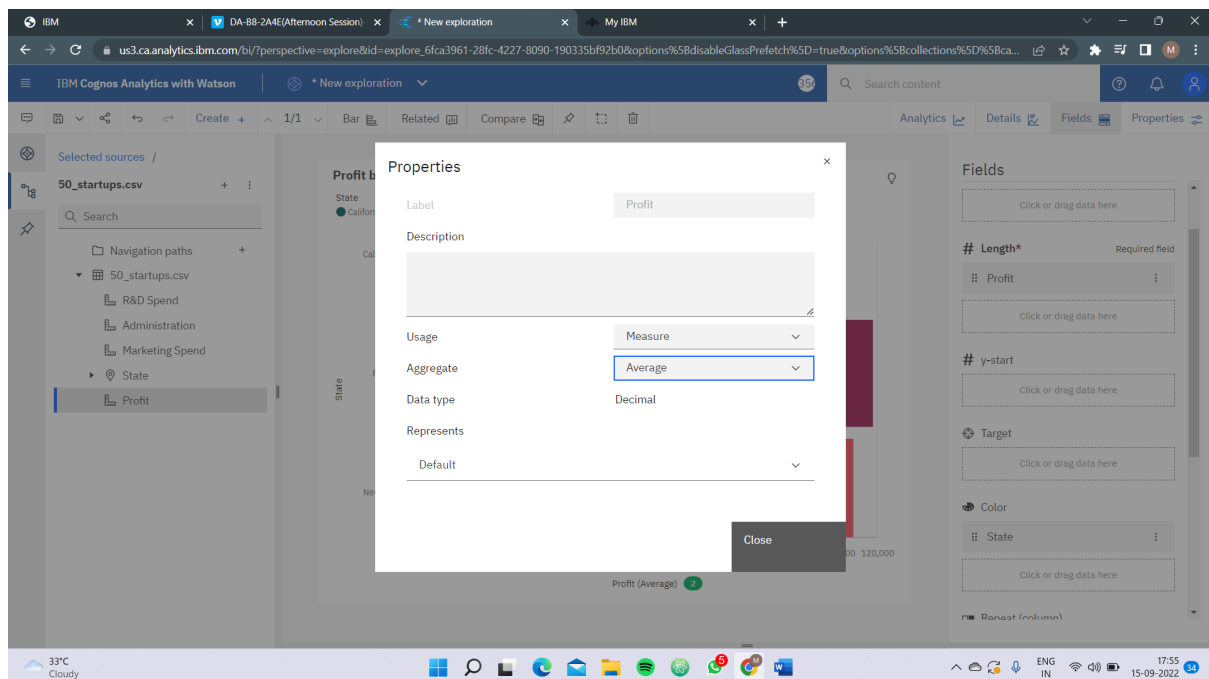
VISUALIZATION

1.Bar Graph

Profit by state



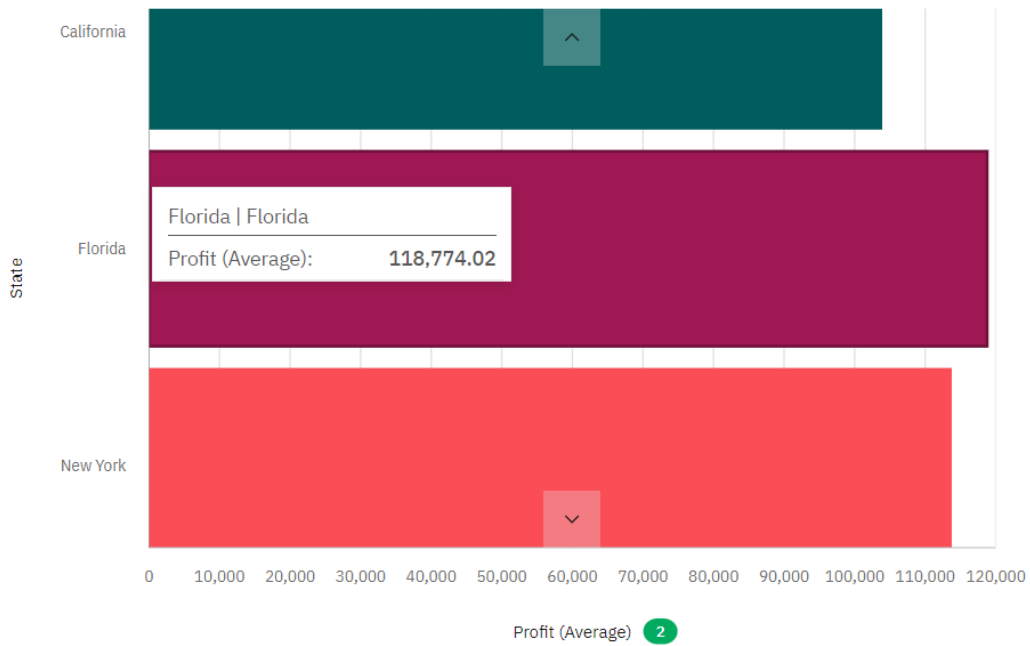
Profit -> properties -> average profit



Profit by State colored by State

State

● California ● Florida ● New York



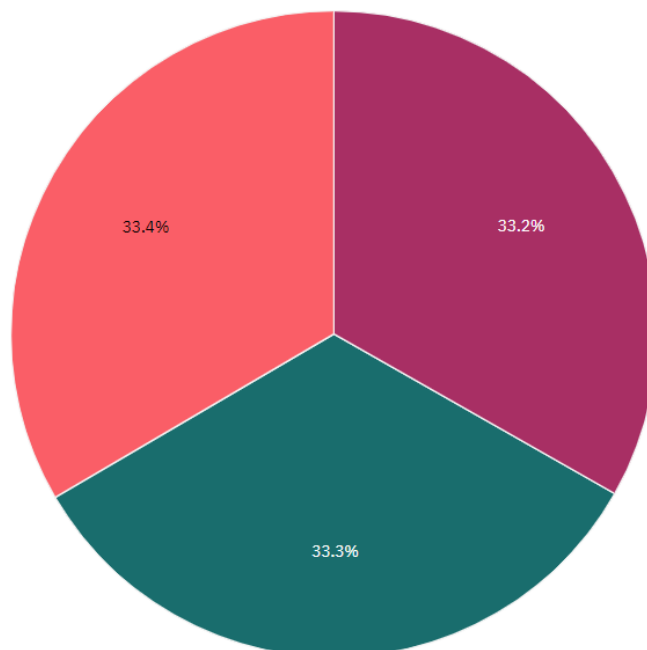
2. Pie Chart

Profit by state

Profit by State 2

State

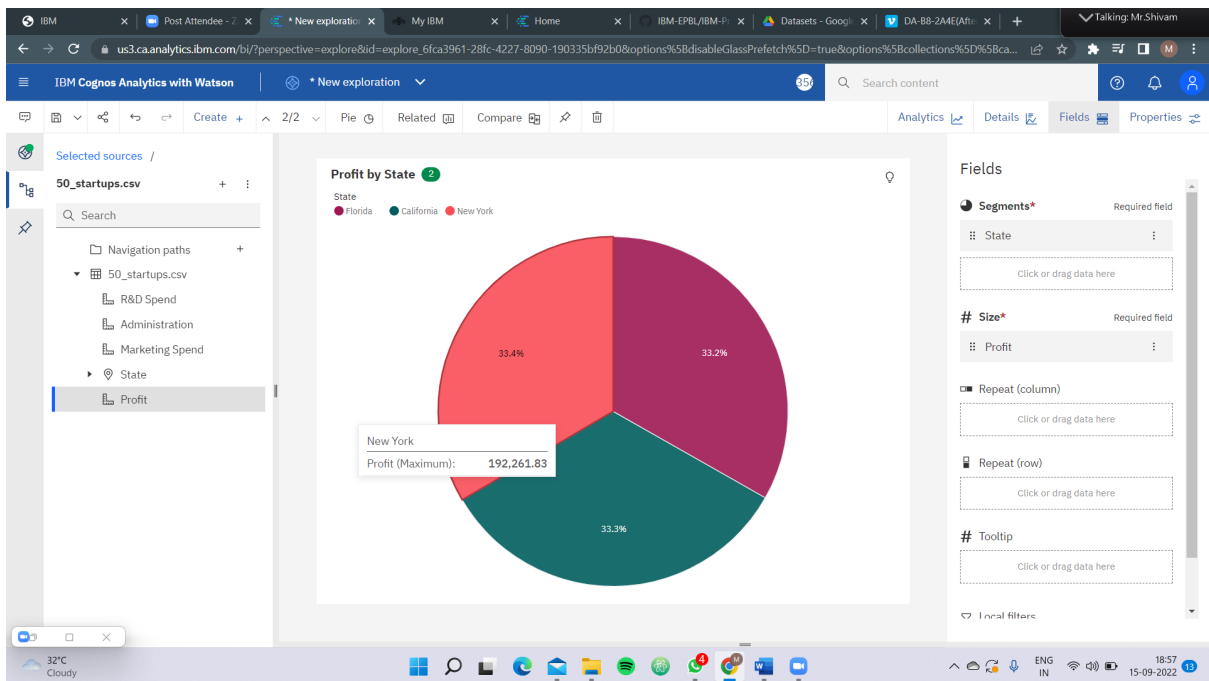
● Florida ● California ● New York



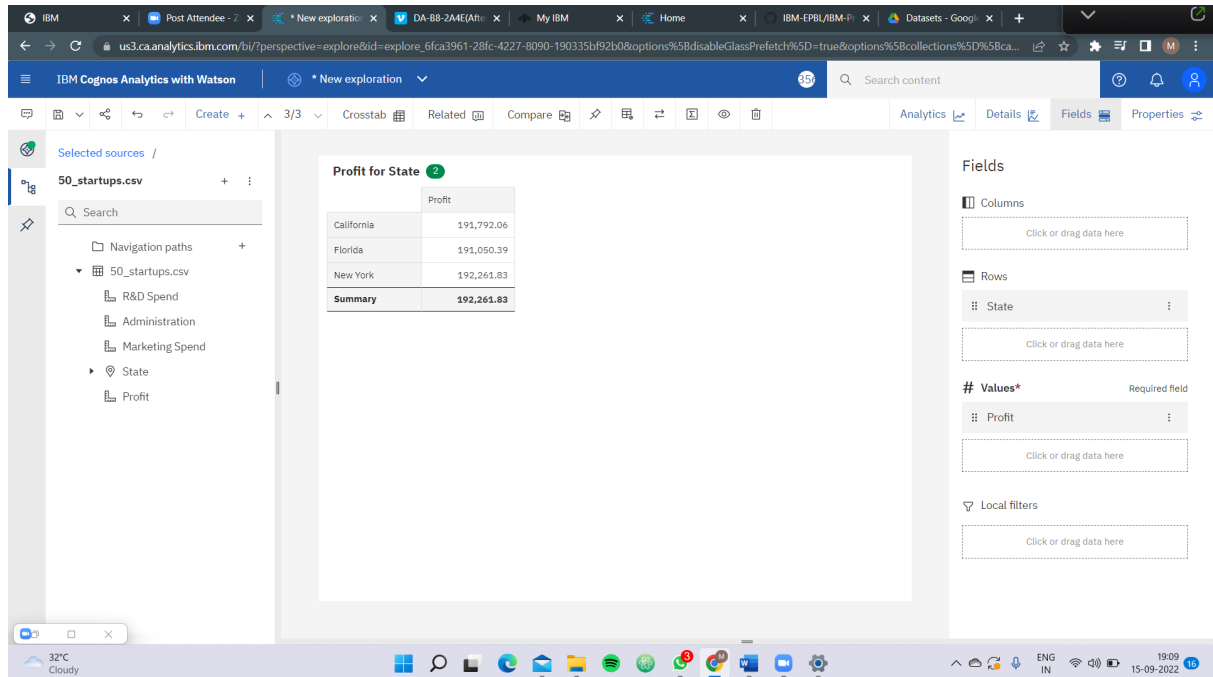
The screenshot shows the IBM Cognos Analytics interface. A 'Properties' dialog box is open for the 'Profit' field. The dialog has the following fields:

- Label:** Profit
- Description:** (Empty text area)
- Usage:** Measure (dropdown menu)
- Aggregate:** Maximum (dropdown menu)
- Data type:** Decimal
- Represents:** (Empty text area)
- Default:** (Empty text area)

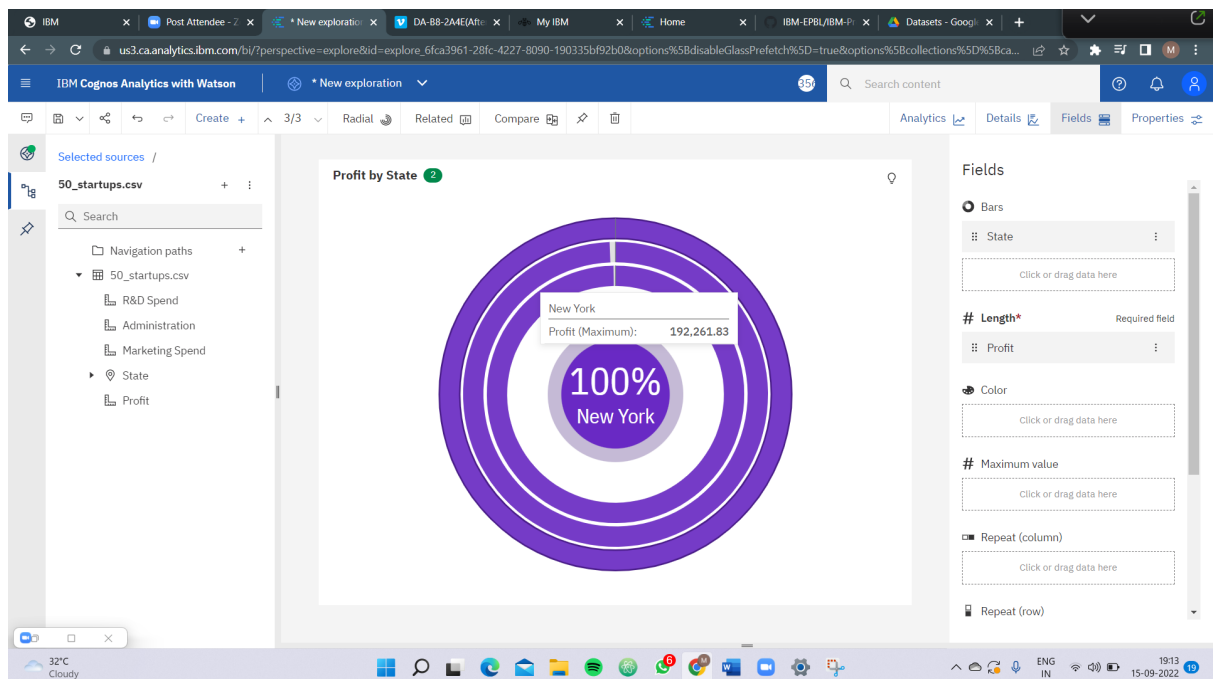
The background shows the '50_startups.csv' data source with a tree view containing 'Navigation paths', '50_startups.csv', 'R&D Spend', 'Administration', 'Marketing Spend', 'State', and 'Profit'. The 'Profit' field is selected in the tree.



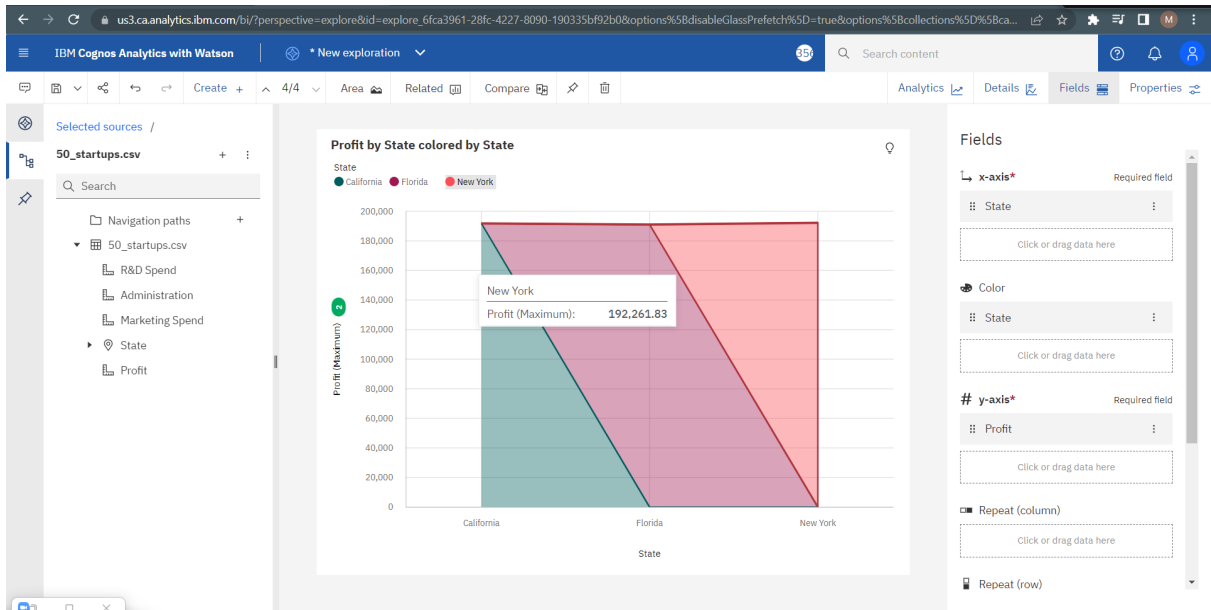
3. Crosstab



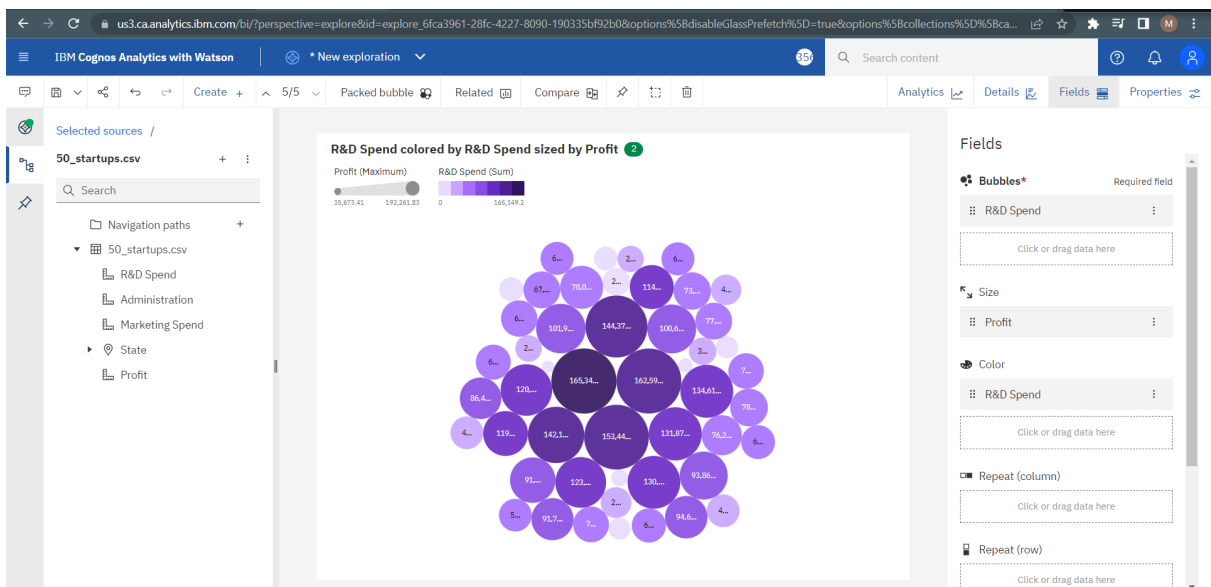
4. Radial



5. Area



6. Packed Bubble



7. Line graph

