

ASSIGNMENT - 1
DATA ANALYTICS
EXPLORATION AND VISUALIZATION OF DATASET

Assignment Date	08 September 2022
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Maximum Marks	2 Marks

QUESTION:

Upload the dataset to Cognos Analytics, explore and visualize the dataset.

PROBLEM DESCRIPTION:

Dataset:50_Startups.csv

https://drive.google.com/file/d/100OUpJFG8GQjhFztbfG5JP_jvzRgoihr/view?usp=sharing

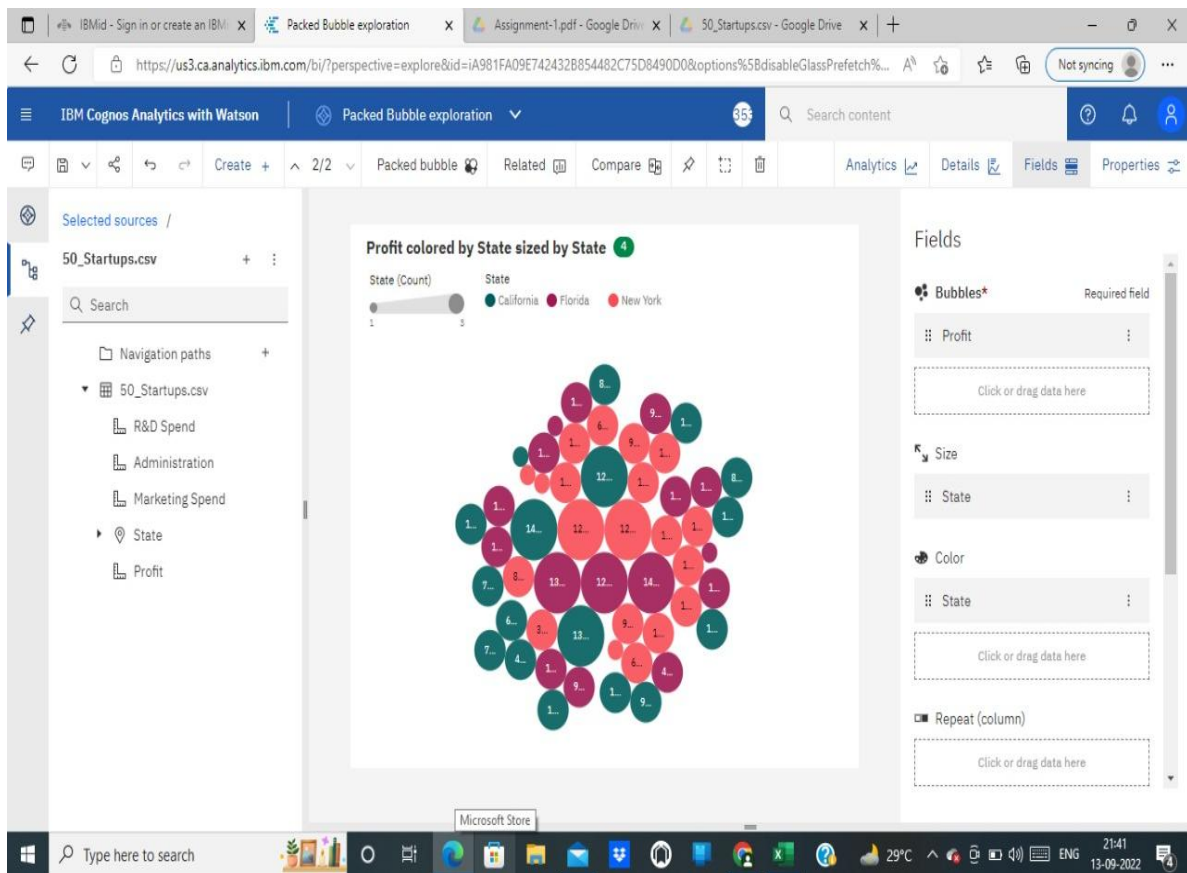
About the 50 startups dataset

This particular dataset holds data from 50 startups in New York, California, and Florida. The features in this dataset are R&D spending, Administration Spending, Marketing Spending, and location features, while the target variable is: Profit.

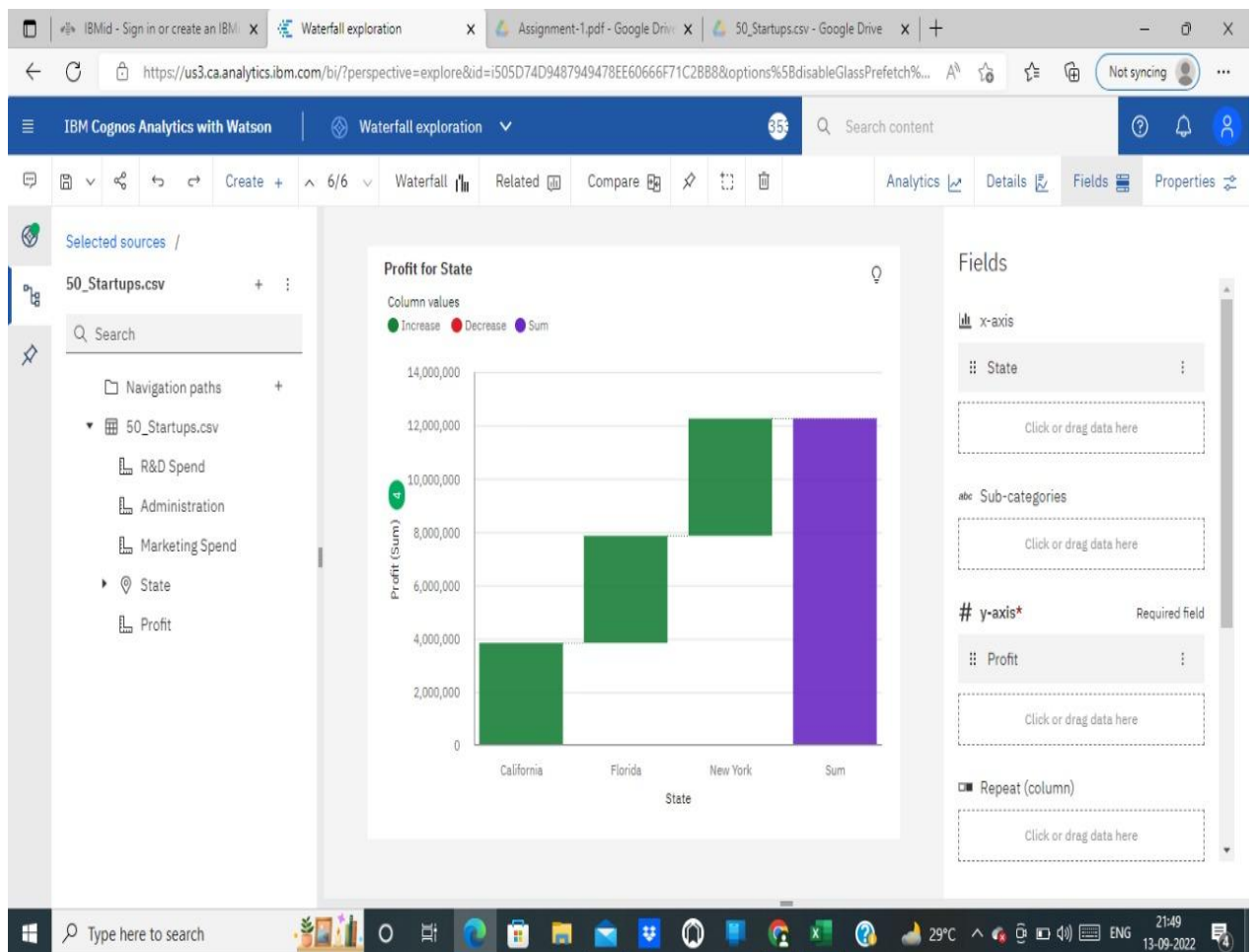
1. R&D spending: The amount which startups are spending on Research and development.
2. Administration spending: The amount which startups are spending on the Admin panel.
3. Marketing spending: The amount which startups are spending on marketing strategies.
4. State: To which state that particular startup belongs.
5. Profit: How much profit that particular startup is making.

SOLUTION: THE VARIOUS EXPLORATION AND VISUALIZATION OF DATASET ARE AS FOLLOWS

1. PACKED BUBBLE EXPLORATION



2.WATERFALL EXPLORATION



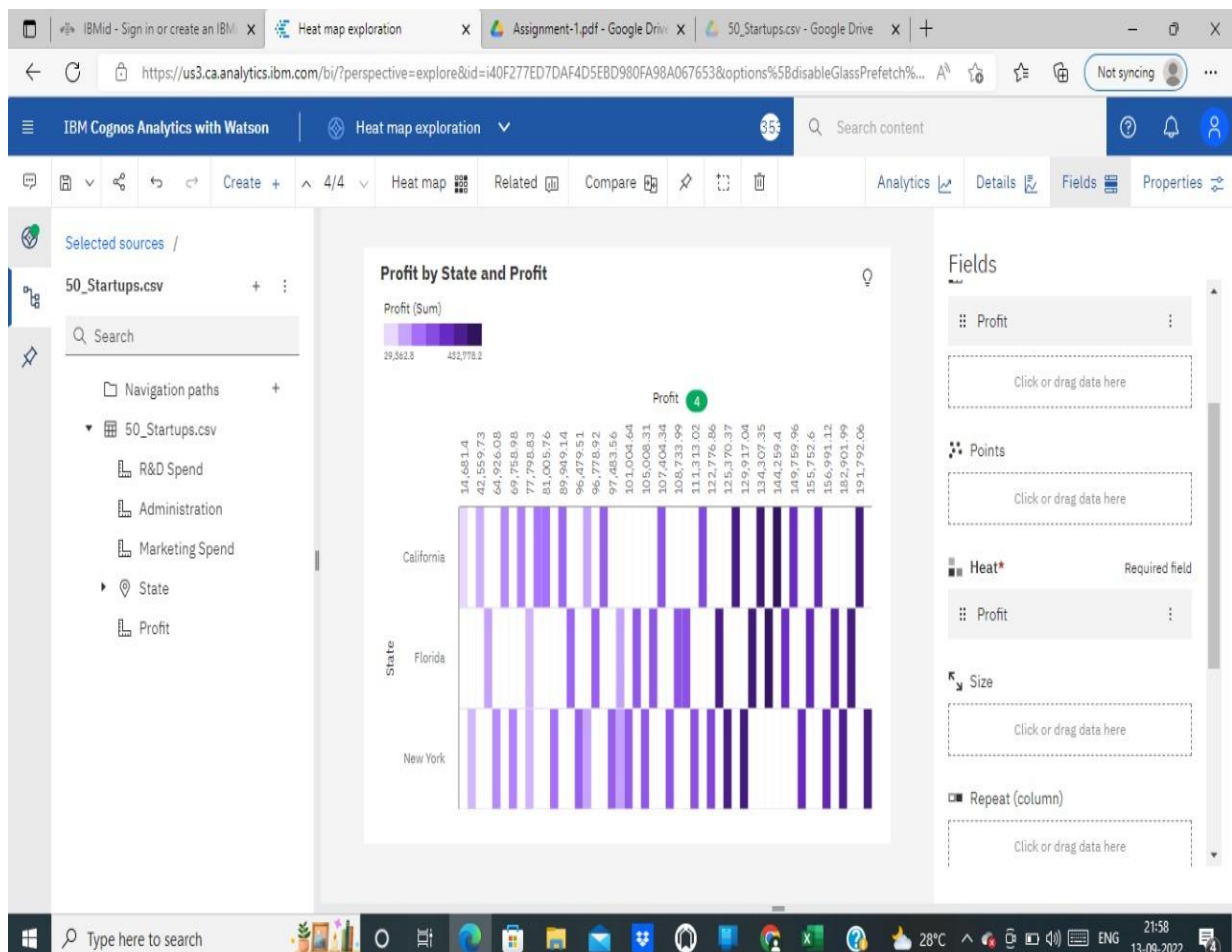
3.CROSSTAB EXPLORATION

The screenshot displays the IBM Cognos Analytics interface for a Crosstab exploration. The main view shows a table titled "Profit for State and Profit" with the following data:

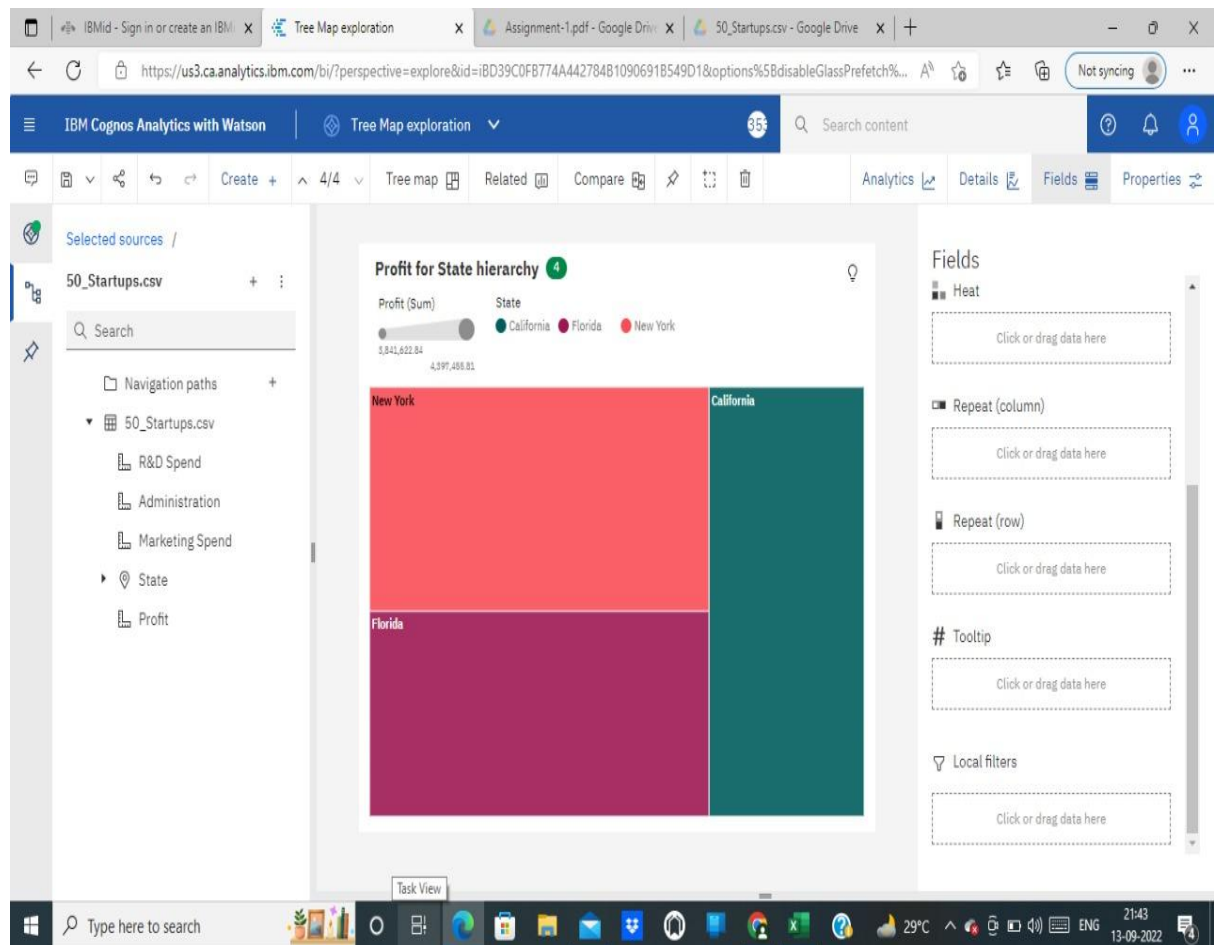
Profit	California	Florida	New York	Summary
14,681.4	29,362.8	(no value)	(no value)	2
35,673.41	(no value)	(no value)	71,346.82	71
42,659.73	85,119.46	(no value)	(no value)	85
49,490.75	(no value)	96,981.5	(no value)	9
64,926.08	(no value)	(no value)	129,852.16	129
66,200.33	130,400.66	(no value)	(no value)	130
69,768.98	(no value)	(no value)	139,517.96	139
71,498.49	142,996.98	(no value)	(no value)	142
77,798.83	(no value)	77,798.83	77,798.83	155
78,239.91	156,479.82	(no value)	(no value)	156
81,006.76	162,011.52	(no value)	(no value)	162

The interface includes a left sidebar with "Selected sources" showing "50_Startups.csv" and a hierarchy of fields: "Navigation paths", "50_Startups.csv", "R&D Spend", "Administration", "Marketing Spend", "State", and "Profit". The right sidebar contains configuration panels: "Fields" (with a "Click or drag data here" prompt), "Rows" (set to "Profit"), "# Values*" (set to "Profit" and marked as a "Required field"), and "Local filters". The bottom of the screen shows a Windows taskbar with the search bar, application icons, and system tray information including temperature (28°C) and date/time (13-09-2022, 22:03).

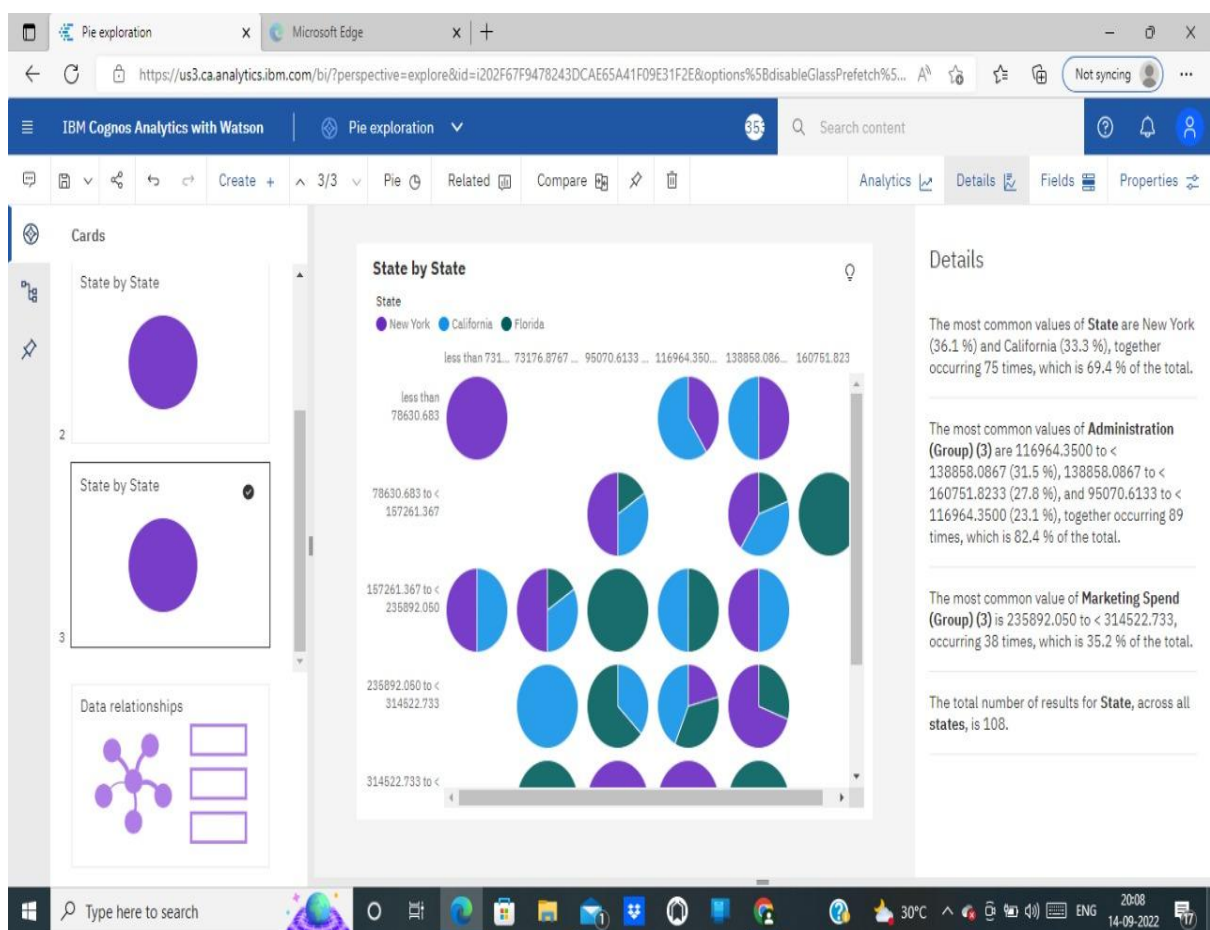
4.HEAP MAP EXPLORATION



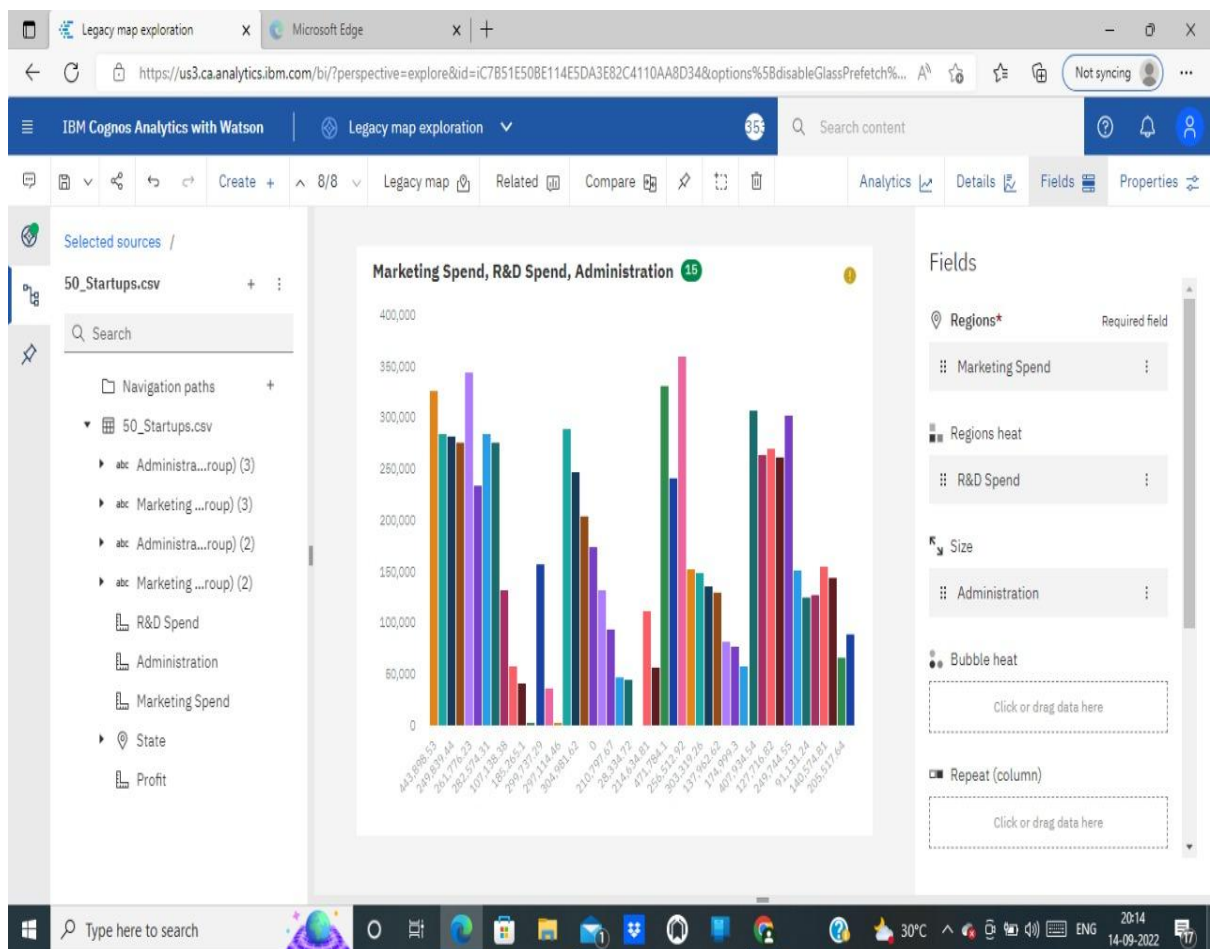
5. TREE MAP EXPLORATION



6. PIE EXPLORATION



7. LEGACY MAP EXPLORATION



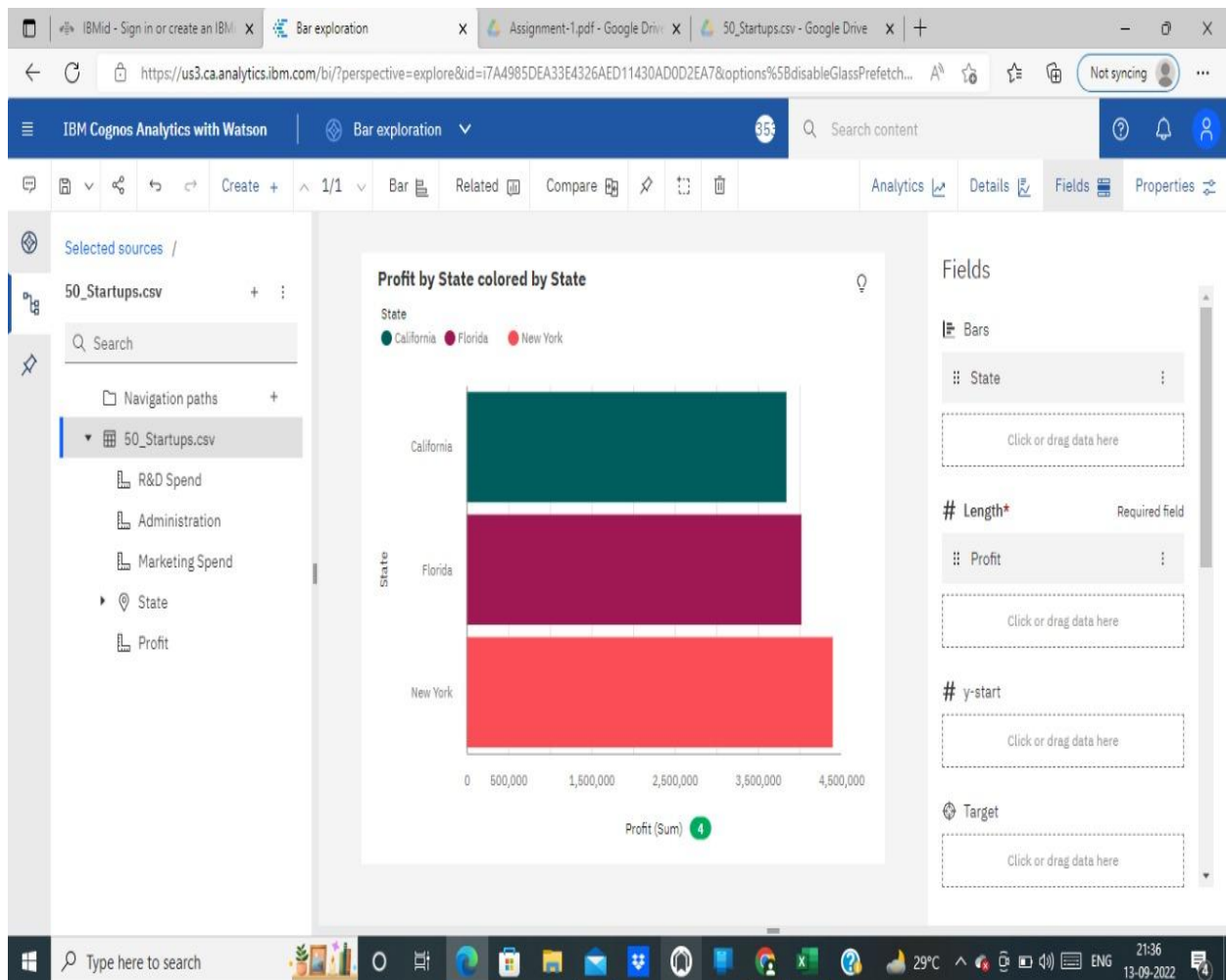
8. TABLE EXPLORATION

The screenshot displays the IBM Cognos Analytics Table Explorer interface. The browser address bar shows the URL: <https://us3.ca.analytics.ibm.com/bi/?perspective=explore&id=i8334C7368497428DAA1E70A7044C75D3&options%5BdisableGlassPrefetch%5D%3Dtrue>. The interface includes a top navigation bar with the title 'IBM Cognos Analytics with Watson' and a 'Table exploration' dropdown. A search bar is located on the right. Below the navigation bar, a toolbar contains various icons for actions like 'Create', 'Table', 'Related', 'Compare', 'Export', and 'Share'. The main content area is divided into three panels:

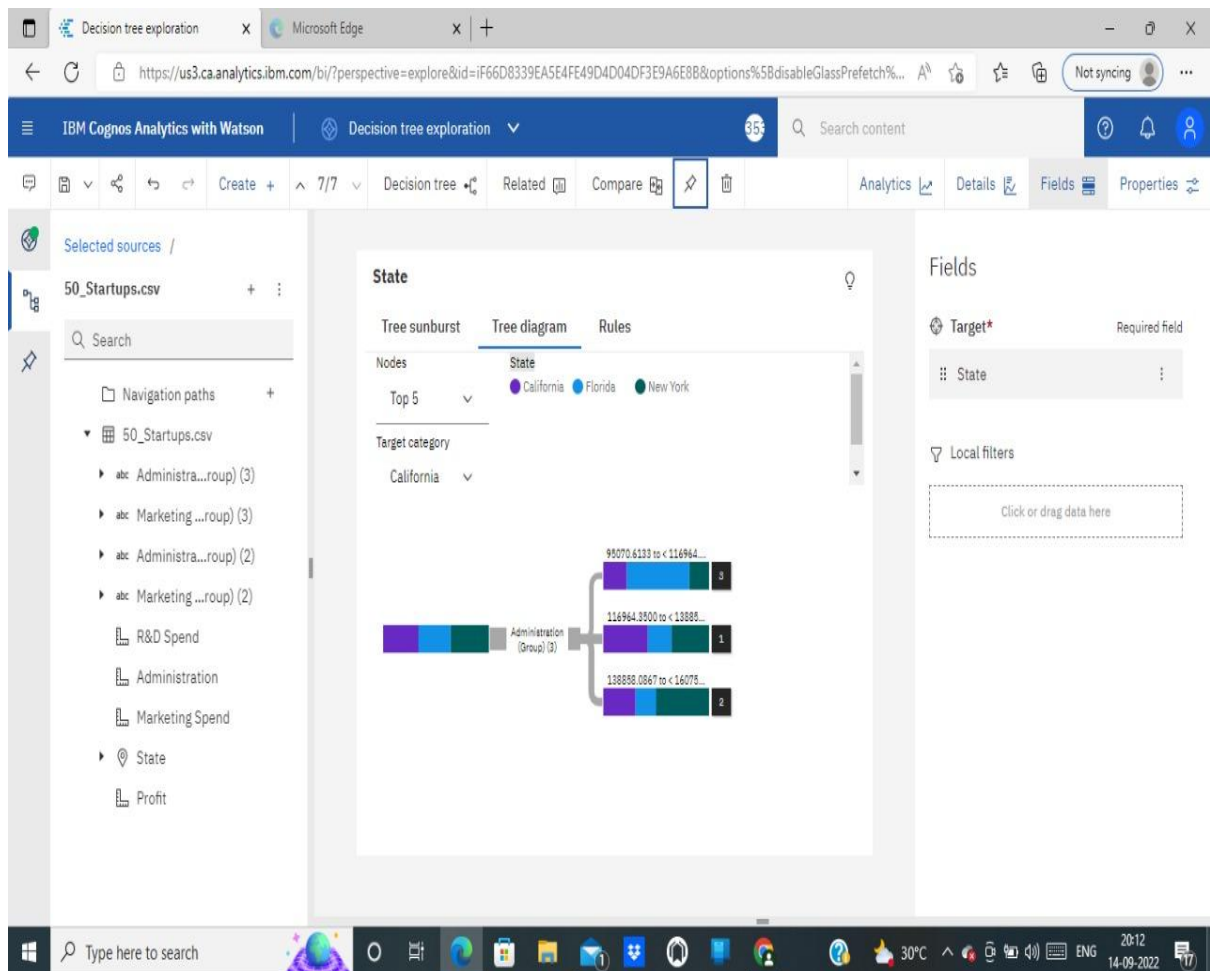
- Selected sources:** Lists the data source '50_Startups.csv' and its navigation paths: 'R&D Spend', 'Administration', 'Marketing Spend', 'State', and 'Profit'.
- Table Explorer:** Displays a table titled 'State and Profit' with the following data:
- Fields:** A panel on the right for configuring the table view, including 'Columns*' and 'Local filters'.

State	Profit
California	3,841,622.84
Florida	4,021,487.43
New York	4,397,455.81
Summary	12,260,566.08

9. BAR EXPLORATION



10. DECISION TREE EXPLORATION



11. NETWORK EXPLORATION

