



Lab Assignment 9

CDAC Thiruvananthapuram

July 23, 2024

1. Read a dataset from p1.csv file and do the following:
 - (a) Create a pivot table for Region and sum(profit) in excel and pandas.
 - (b) Create a pivot table for Region as row, month as column and sum(profit) as values in excel and pandas.
2. Read company sales data and do the following with matplotlib:
 - (a) Read Total profit of all months and show it using a line plot.
 - (b) Read all product sales data and show it using a multiline plot.
 - (c) Read toothpaste sales data of each month and show it using a scatter plot.
 - (d) Read face cream and facewash product sales data and show it using the bar chart.
 - (e) Read sales data of bathing soap of all months and show it using a bar chart.
 - (f) Read the total profit of each month and show it using the histogram to see the most common profit ranges.
 - (g) Calculate total sale data for last year for each product and show it using a Pie chart.
 - (h) Read Bathing soap facewash of all months and display it using the Subplot.
3. Write a python program to read a dataset from diamonds file and do the following:

- (a) Read values to dataframe and print the first 6 rows.
 - (b) Print the concise summary of the dataframe.
 - (c) calculate the mean of each numeric column in dataframe.
 - (d) find the count of null values in dataframe. Calculate min, max price for each cut of diamonds.
 - (e) Take the count of all duplicate rows in the dataframe.
- 4. Explore all the plots in seaborn using tips dataset.
 - 5. Take the music1 sheet from charts.xlsx and create sunburst chart, treemap and icicle map.