Assignment 1 – Data Visualization

Problem Statement:

You work in XYZ Corporation as a Data Analyst. Your corporation has told you to visualize the mtcars.csv dataset with various plots.

Tasks To Be Performed:

- 1. Start off by importing the cars.csv file in the jupyter notebook.
- 2. Generate a line plot graph for the column 'model' and 'hp':
- a. Map the 'model' column on the x-axis
- b. Map the 'hp' column on the y-axis
- c. Provide the x-axis label as Models of the cars
- d. Provide the y-axis label as Horse-Power of Cars
- e. Set the title as Model Names vs HorsePower

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In [2]: import numpy as np import pandas as pd import pandas as pd import matplotlib.pyplot as plt %matplotlib inline import seaborn as sns df = pd.read_csv(r"csv files\cars-1.csv") df.head()

Out[2]: model mpg cyl disp hp drat wt qsec vs am gear carb

0 Mazda RX4 21.0 6 160.0 110 3.90 2.620 16.46 0 1 4 4 4 1 Mazda RX4 Wag 21.0 6 160.0 110 3.90 2.875 17.02 0 1 4 4 2 2 Datsun 710 22.8 4 108.0 93 3.85 2.320 18.61 1 1 4 1 4 1 3 Hornet Sportabout 18.7 8 360.0 175 3.15 3.440 17.02 0 0 0 3 2
```

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In [10]: plt.figure(figsize=(20,8))
    sns.lineplot(data=df, x='model', y='hp')
    plt.xticks(rotation=45)
    plt.xlabel('Models of the cars')
    plt.ylabel('Horse-Power of Cars')
    plt.title('Model Names vs HorsePower')
    plt.show()
```



