Import requests

From bs4 import BeautifulSoup

Import pandas as pd

Import matplotlib.pyplot as plt

# **Task 1**: Scraping data from a classified website (Pakwheels in this example)

url = ‘https://www.pakwheels.com/used-cars/search/-/’

headers = {‘User-Agent’: ‘Mozilla/5.0’}

response = requests.get(url, headers=headers)

soup = BeautifulSoup(response.text, ‘html.parser’)

# Extracting relevant information (e.g., car name, price, mileage)

Cars = []

For listing in soup.find\_all(‘div’, class\_=’list’):

Car\_name = listing.find(‘h3’, class\_=’car-name’).text.strip()

Car\_price = listing.find(‘span’, class\_=’price’).text.strip()

Car\_mileage = listing.find(‘span’, class\_=’mileage’).text.strip()

Cars.append({‘Name’: car\_name, ‘Price’: car\_price, ‘Mileage’: car\_mileage})

# **Task 2**: Creating a CSV file

Df = pd.DataFrame(cars)

Df.to\_csv(‘cars\_data.csv’, index=False)

# **Task 3**: Preprocessing the data (if needed)

# No preprocessing needed in this example

# **Task 4**: Visualizing the data using Matplotlib

Plt.figure(figsize=(10, 6))

Plt.scatter(df[‘Price’], df[‘Mileage’], color=’blue’, alpha=0.5)

Plt.title(‘Car Price vs. Mileage’)

Plt.xlabel(‘Price’)

Plt.ylabel(‘Mileage’)

Plt.grid(True)

Plt.show()

# **Task 5**: Writing a small report on the graph

Print(“Report:”)

Print(“The scatter plot shows the relationship between the price and mileage of used cars listed on Pakwheels.”)

Print(“From the plot, it can be observed that there is a general trend of higher prices for cars with lower mileage.”)