PROGRAM-4

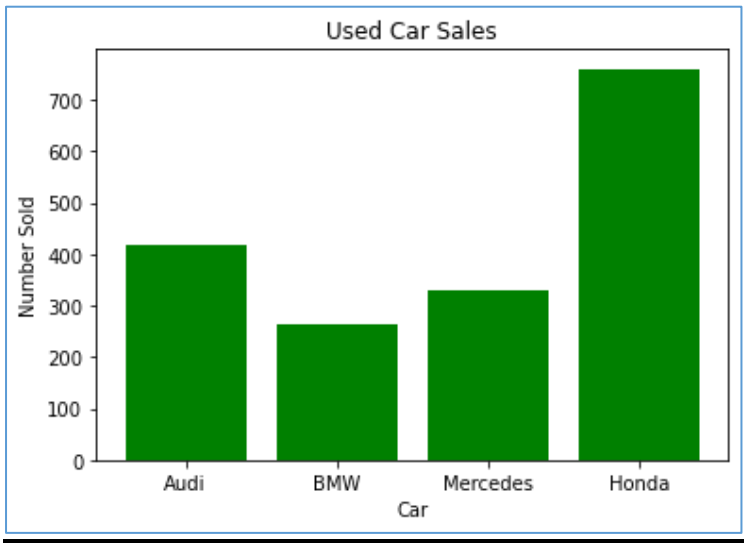
4a) Write a Python program to demonstrate how to draw a Bar Plot using Matplotlib.

Dataset (Cars_Barplot.csv)

Car	Sales
Audi	419
BMW	263
Mercedes	330
Honda	760

```
import matplotlib.pyplot as plt
import pandas as pd
# Initialize the lists for X and Y
data = pd.read_csv("Cars_Barplot.csv")
df = pd.DataFrame(data)
X = list(df.iloc[:, 0])
Y = list(df.iloc[:, 1])
# Plot the data using bar() method
plt.bar(X, Y, color='g')
plt.title("Used Car Sales")
plt.xlabel("Car")
plt.ylabel("Number Sold")
# Show the plot
plt.show()
```

OUTPUT:



4b) Write a Python program to demonstrate how to draw a Scatter Plot using Matplotlib.

Dataset (Cars.csv)

Id	Model	Price	Age	Mfg_Month	Mfg_ Year	KM	Fuel_ Type	HP	Met_ Color	Auto matic	cc	Doors
1	TOY OTA Corolla 2.0 D4D HATC HB TERR A 2/3-Doors	13500	23	10	2002	46986	Diesel	90	1	0	2000	3
2	TOY OTA Corolla 2.0 D4D HATC HB TERR A 2/3-Doors	13750	23	10	2002	72937	Diesel	90	1	0	2000	3
3	?TOY OTACorolla 2.0 D4D HATC HB TERR A 2/3-Doors	13950	24	9	2002	41711	Diesel	90	1	0	2000	3
4	TOY OTA Corolla 2.0 D4D HATC HB TERR A 2/3-Doors	14950	26	7	2002	48000	Diesel	90	0	0	2000	3
5	TOY OTA Corolla 2.0 D4D HATC HB SOL 2/3-Doors	13750	30	3	2002	38500	Diesel	90	0	0	2000	3

```
# import the necessary libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
# Importing data.
cars_data = pd.read_csv("Cars.csv")
# Create scatter plot using two variables, Age and Price.
plt.scatter(cars_data['Age'],cars_data['Price'],c='blue')
# To set the title
plt.title('Scatter plot of Price vs Age of the Cars')
# To set the x and y axis labels.
plt.xlabel('Age (months)')
plt.ylabel('Price (Euros)')
# To show the scatter plot
plt.show()
```

OUTPUT: