

PRACTICAL-7

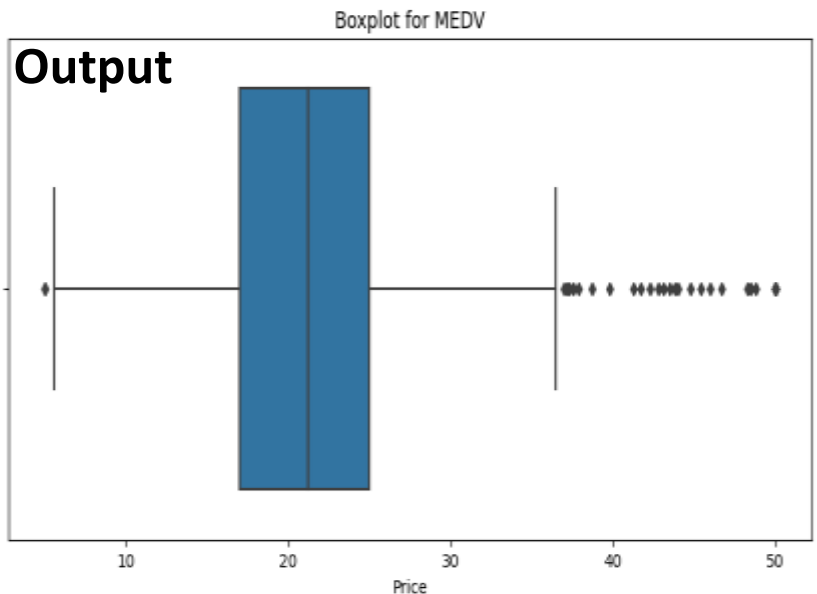
Visualization Of Data

Step 1

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import scipy
import warnings
warnings.filterwarnings('ignore')
boston_df=pd.read_csv('/content/boston.csv')
print(boston_df)
```

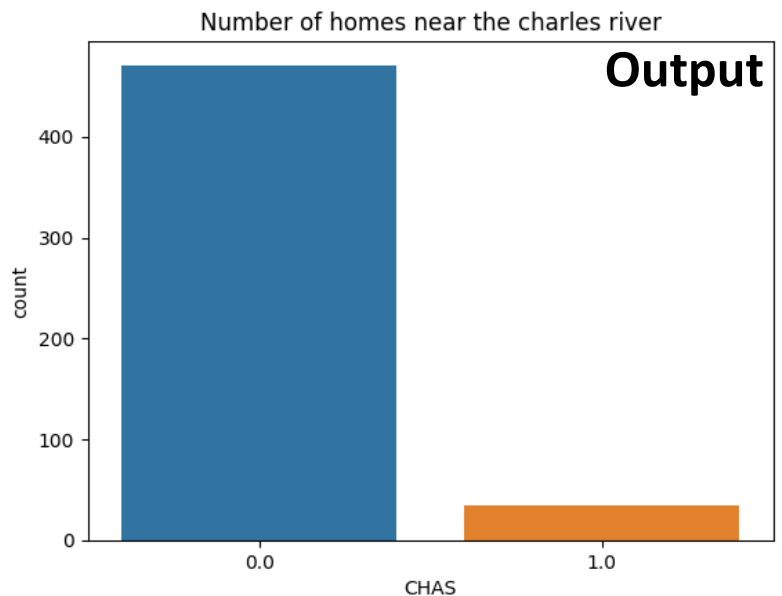
Step 2

```
plt.figure(figsize=(10,5))
sns.boxplot(x = boston_df.Price)
plt.title('Boxplot for MEDV')
plt.show()
```



Step 3

```
ax2 = sns.countplot
(x='CHAS', data=boston_df)
ax2.set_title
('No. of homes near charles river')
```

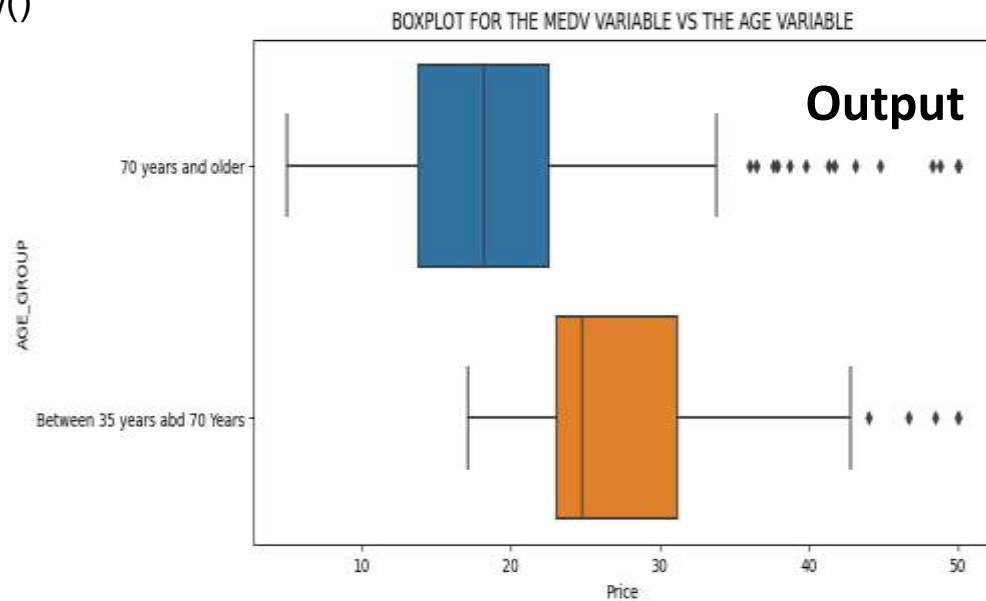


Step 4

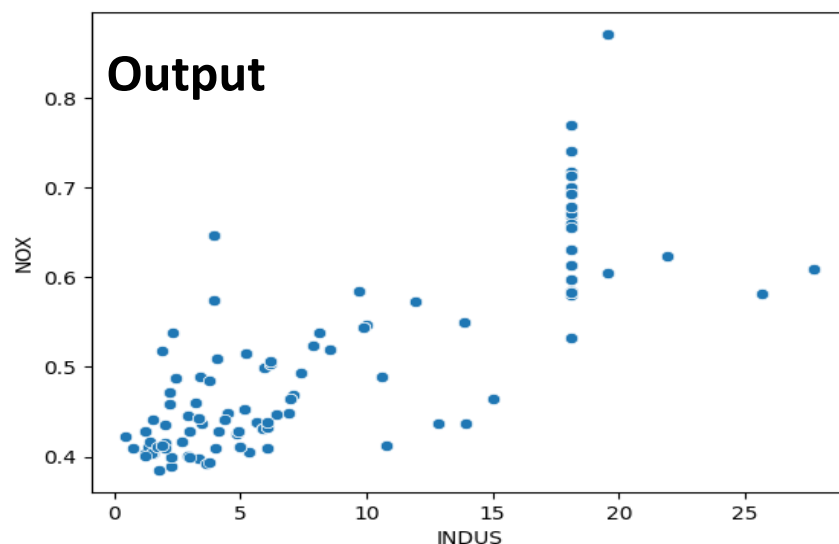
```
boston_df.loc[(boston_df["AGE"]<35),"AGE_GROUP"] = "35 years and younger"
boston_df.loc[(boston_df["AGE"]<35) & (boston_df["AGE"]<70) ,"AGE_GROUP"]
= "Between 35 years abd 70 Years"
boston_df.loc[(boston_df["AGE"]>=70),"AGE_GROUP"] = "70 years and older"
plt.figure(figsize=(10,5))
sns.boxplot(x=boston_df.Price, y=boston_df.AGE_GROUP, data=boston_df)
plt.title("BOXPLOT FOR THE MEDV VARIABLE VS THE AGE VARIABLE")
```

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```
plt.show()
```



```
ax4 = sns.scatterplot(y='NOX', x="INDUS", data=boston_df)  
ax4.set_title("Nitric oxide concentration per proportion of no-retail business acres  
per town")
```



```
plt.figure(figsize=(10,5))  
sns.distplot(a=boston_df.PTRATIO, bins=10, kde=False, color="red")  
plt.title("HISTOGRAM FOR THE PUPIL TO TEACHER PATIO VARIABLE")  
plt.show()
```

