MOUNT GOOG DRIVE

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```
from google.colab import drive
drive.mount('/content/drive')
```

```
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).
```

IMPORT REQUIRED PACKAGES

```
import numpy as np
import pandas as pd
import matplotlib.pyplot    plt
%matplotlib inline
import seaborn as sns
import math
```

LOAD DATAS

```
df=pd.read_csv("/content/drive/MyDrive/House Price India.csv")
df.head()
```

id	number of bedrooms	number of bathrooms	living area		number of floors	waterfront present	number of views
6762810145	42491	2.50	3650	9050	2.0		
6762810635	42491	2.50	2920	4000			
6762810998	42491	2.75	291	9480			
6762812605	42491	2.50	331	42998	2.0		
6762812919	42491	2.00	271	4500			

5 rows × 23 columns

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```
plt.figure(figsize=(8, 6)
column_name="id"                                                    ET
plt.hist(df[column_name], bins=20, color='blue   alpha=0 7)
plt.title("Histogram of " + column_name)
plt.xlabel(column_name)
plt.ylabel("Frequency")
plt.grid(True)
plt.show()
```

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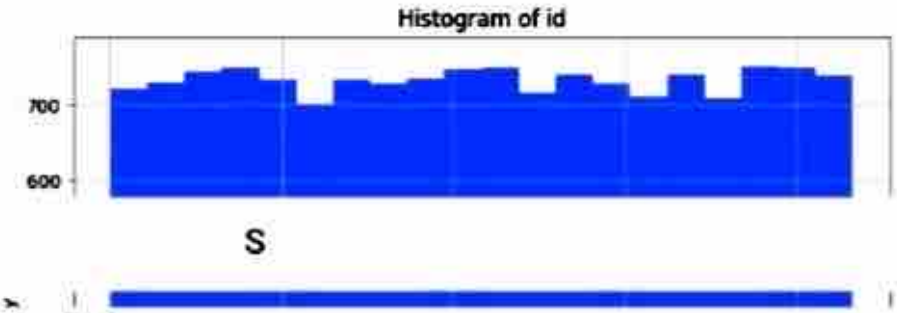

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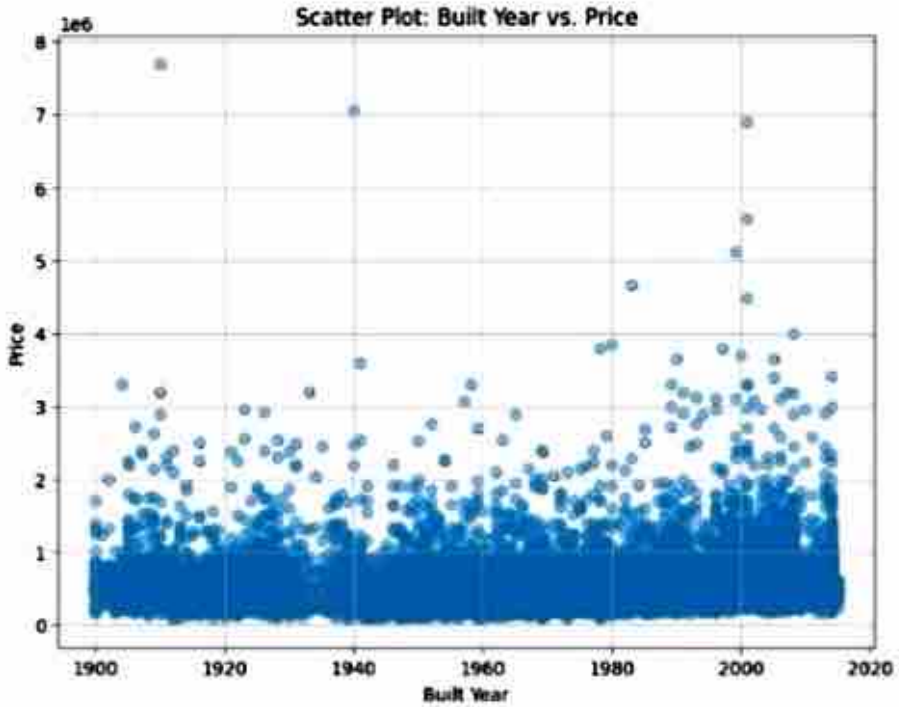
```
x_variable = 'Built Year'
y_variable = 'Price'

# Create a scatter plot
plt.figure(figsize=(8, 6))
plt.scatter(df[x_variable], df[y_variable], alpha=0.5)
plt.title('Scatter Plot: ' + x_variable + ' vs. ' + y_variable)
plt.xlabel(x_variable)
plt.ylabel(y_variable)
plt.grid(True)
plt.show()
```



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```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot    plt

# Read in the Dataframe
df = pd.read_csv('/content/drive/MyDrive/House Price India.csv

# plotting histogram
plt.hist(df['Price'],bins = 35,
         alpha = 0.45, color =
plt.show()
```

DESC PTIVE STATISTICS

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```
descriptive_stats = df.describe()

# Display the descriptive statistics
print("Descriptive Statistics:")
print(descriptive_stats)
```

```
Descriptive Statistics:
                 id          Date  number of bedrooms  number of bathrooms
count  1.462000e+04  14620.000000        14620.000000         14620.000000
mean   6.762821e+09  42604.538646            3.379343             2.129583
std    6.237575e+03     67.347991            0.938719             0.769934
min    6.762810e+09  42491.000000            1.000000             0.500000
25%    6.762815e+09  42546.000000            3.000000             1.750000
50%    6.762821e+09  42600.000000            3.000000             2.250000
75%    6.762826e+09  42662.000000            4.000000             2.500000
       6.762832e+09  42734.000000           33.000000             8.000000

        living area      lot area  number of floors  waterfront present
count  14620.000000  1.462000e+04      14620.000000        14620.000000
mean    2098.262996  1.509328e+04          1.502360            0.007661
std      928.275721  3.791962e+04          0.540239            0.087193
min      370.000000  5.200000e+02          1.000000            0.000000
25%     1440.000000  5.810750e+03          1.000000            0.000000
50%     1930.000000  7.620000e+03          1.500000            0.000000
75%     2570.000000  1.080000e+04          2.000000            0.000000
max    13540.000000  1.074218e+06          3.500000            1.000000

       number of views  condition of the house        Built Year
          14620.000000            14620.000000      14620.000000
mean          0.233105                3.430506       1970.926402
std           0.766259                0.664151         29.493625
min           0.000000                1.000000       1900.000000
25%           0.000000                3.000000       1951.000000
50%           0.000000                3.000000       1975.000000
75%           0.000000                4.000000       1997.000000
max           4.000000                5.000000       2015.000000

       Renovation Year    Postal Code      Lattitude      Longitude
          14620.000000   14620.000000   14620.000000   14620.000000
mean         98.924008  122033.062244      52.792848    -114.404007
std         416.216661      19.082418       0.137522       0.141326
min           0.000000  122003.000000      52.385900    -114.709000
25%           0.000000  122017.000000      52.707600    -114.519000
50%           0.000000  122032.000000      52.806400    -114.421000
75%           0.000000  122048.000000      52.908900    -114.315000
        2015.000000  122072.000000      53.007600    -113.505000

       living_area_renov  lot_area_renov  Number of schools nearby
            14620.000000    14620.000000              14620.000000
mean         1996.782257    12753.500068                  2.012244
std           691.093366    26058.414467                  0.817284
min           460.000000      651.000000                  1.000000
25%          1490.000000     5097.750000                  1.000000
50%          1850.000000     7620.000000                  2.000000
75%          2380.000000    10125.000000                  3.000000
max          6110.000000   560617.000000                  3.000000

       Distance from the airport         Price
                    14620.000000  1.462000e+04
mean                   64.950958  5.389322e+05
std                     8.936008  3.675324e+05
min                    50.000000  7.800000e+04
25%                    57.000000  3.200000e+05
50%                    65.000000  4.500000e+05
```

```
mean_value = df['Price'].mean()
print("Mean of 'your_column':", mean_value)
```

```
Mean of 'your_column': 538932.2183310634
```

Handle the Missing values.

```
# Check for missing values
missing_values = df.isnull().sum()
print("Missing Values:")
print(missing_values)

# Option 1: Remove rows with missing values
df_cleaned = df.dropna()

# Option 2: Fill missing values with a specific value (e     mean or median)
# Replace 'your_column' with the actual column name
mean_value = df['Price'].mean()
data_filled = df.fillna(mean_value)

# Option 3: Forward fill or backward fill missing values
data_ffill = df.ffill()  # Forward fill missing values
data_bfill = df.bfill()  # Backward fill missing values

# Option 4: Interpolate missing values
data_interpolated = df.interpolate()
```

```
Missing Values:
id                                  0
Date                                0
number of bedrooms                  0
number of bathrooms                 0
living area                         0
lot area                            0
number of floors                    0
waterfront present                  0
number of views                     0
condition of the house              0
grade of the house                  0
Area of the house(excluding basement)    0
Area of the basement                0
Built Year                          0
Renovation Year                     0
Postal Code                         0
Lattitude                           0
Longitude                           0
living_area_renov                   0
lot_area_renov                      0
Number of schools nearby            0
Distance from the airport           0
Price                               0
dtype: int64
```