

qwuobzqlo

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DIGITAL ASSIGNMENT - 2

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```
[6]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np

dataset = pd.read_csv('/content/House Price.csv')

# Task 1: Univariate Analysis
plt.figure(figsize=(8, 4))
sns.histplot(dataset['area'], bins=20, kde=True)
plt.title('Histogram of Area')
plt.xlabel('area')
plt.ylabel('price')
plt.show()

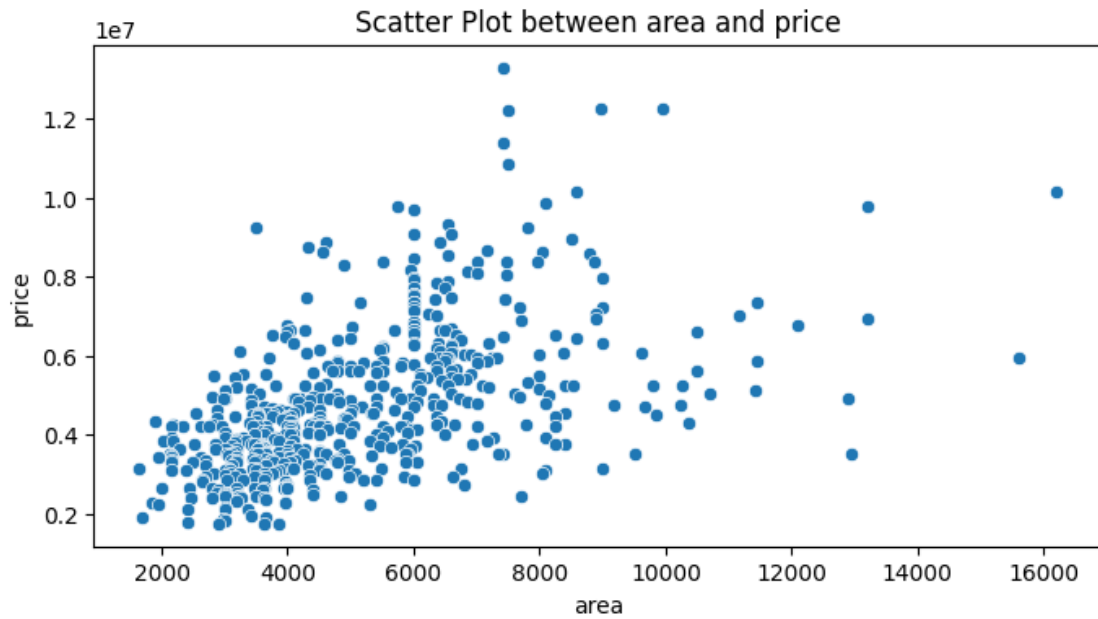
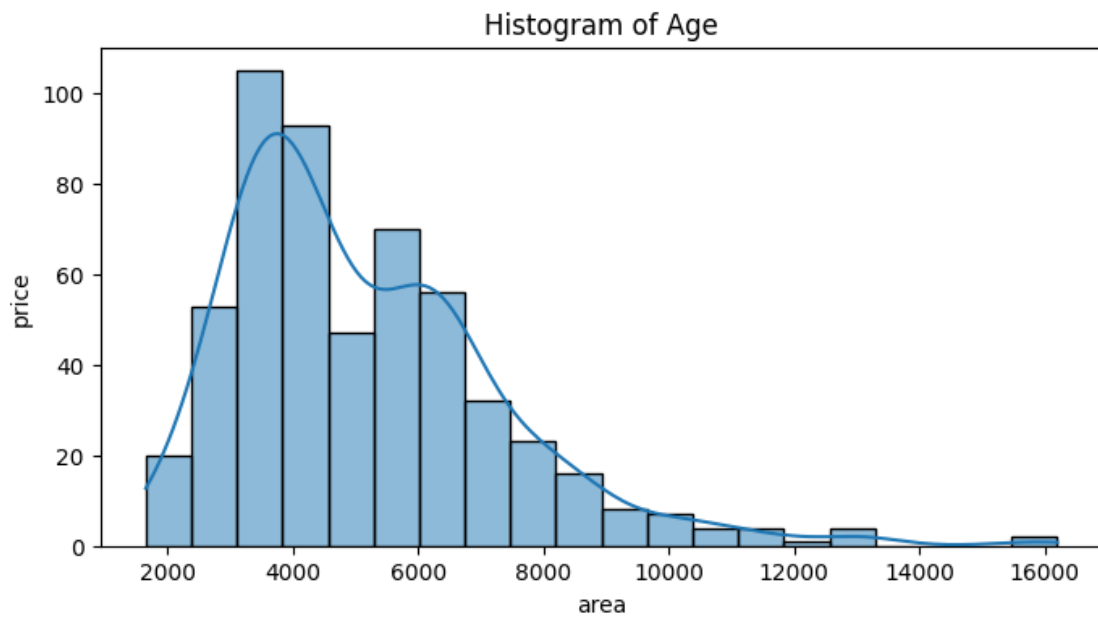
# Task 2: Bivariate Analysis
plt.figure(figsize=(8, 4))
sns.scatterplot(data=dataset, x='area', y='price')
plt.title('Scatter Plot between area and price')
plt.xlabel('area')
plt.ylabel('price')
plt.show()

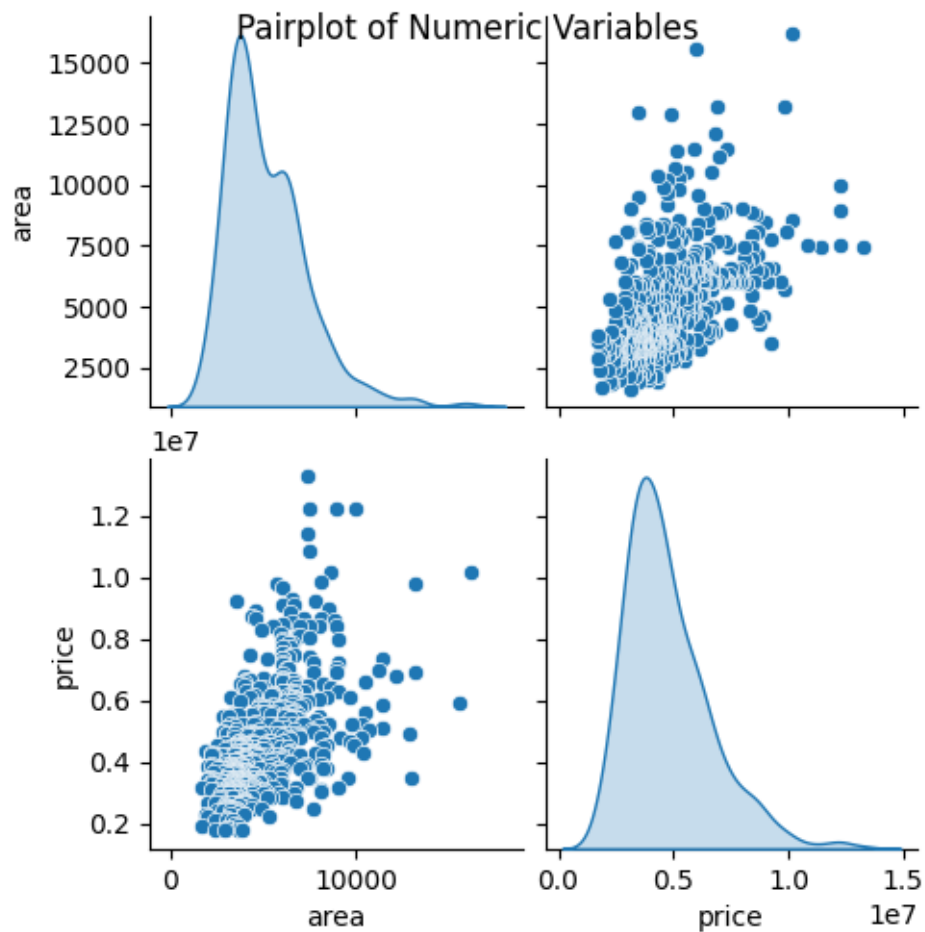
# Task 3: Multivariate Analysis
sns.pairplot(dataset[['area', 'price', 'furnishingstatus']], diag_kind='kde')
plt.suptitle('Pairplot of Numeric Variables')
plt.show()

# Task 4: Descriptive Statistics
descriptive_stats = dataset.describe()
print("Descriptive Statistics:\n", descriptive_stats)

# Task 5: Handling Missing Values
dataset['price'].fillna(dataset['price'].mean(), inplace=True)
```

```
missing_values = dataset.isnull().sum()
print("Missing Values After Handling:\n", missing_values)
```





Descriptive Statistics:

| | price | area | bedrooms | bathrooms | stories \ |
|-------|--------------|--------------|------------|------------|------------|
| count | 5.450000e+02 | 545.000000 | 545.000000 | 545.000000 | 545.000000 |
| mean | 4.766729e+06 | 5150.541284 | 2.965138 | 1.286239 | 1.805505 |
| std | 1.870440e+06 | 2170.141023 | 0.738064 | 0.502470 | 0.867492 |
| min | 1.750000e+06 | 1650.000000 | 1.000000 | 1.000000 | 1.000000 |
| 25% | 3.430000e+06 | 3600.000000 | 2.000000 | 1.000000 | 1.000000 |
| 50% | 4.340000e+06 | 4600.000000 | 3.000000 | 1.000000 | 2.000000 |
| 75% | 5.740000e+06 | 6360.000000 | 3.000000 | 2.000000 | 2.000000 |
| max | 1.330000e+07 | 16200.000000 | 6.000000 | 4.000000 | 4.000000 |

| | parking |
|-------|------------|
| count | 545.000000 |
| mean | 0.693578 |
| std | 0.861586 |
| min | 0.000000 |
| 25% | 0.000000 |
| 50% | 0.000000 |

```
75%      1.000000
max       3.000000
Missing Values After Handling:
  price      0
  area       0
  bedrooms   0
  bathrooms  0
  stories    0
  mainroad   0
  guestroom  0
  basement   0
  hotwaterheating 0
  airconditioning 0
  parking    0
  prefarea   0
  furnishingstatus 0
dtype: int64
```