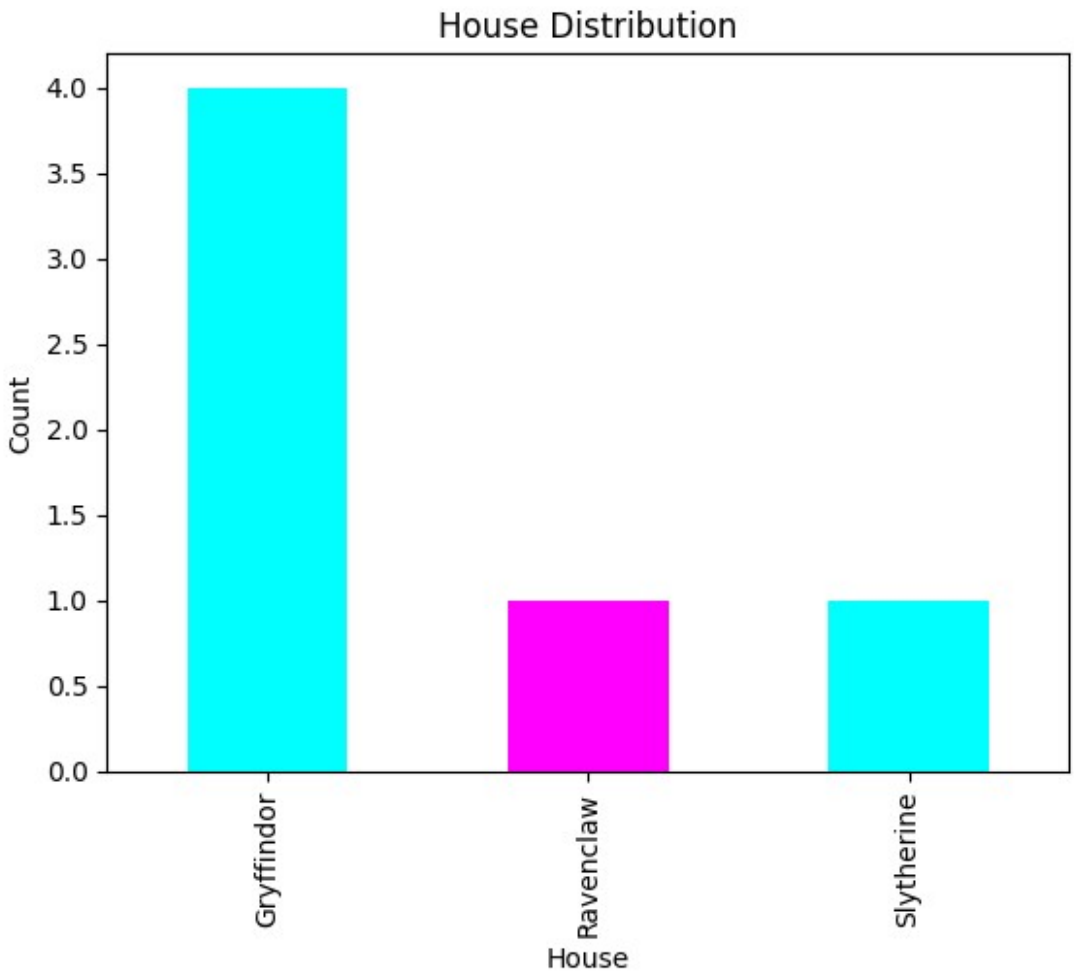
```python
import pandas as pd
import matplotlib.pyplot as plt

# Sample dataset
data = {
    'Name': ['Harry', 'Ron', 'Hermione', 'Neville', 'Luna', 'Draco'],
    'Gender': ['Male', 'Male', 'Female', 'Male', 'Female', 'Male'],  # Qualitative
    'House': ['Gryffindor', 'Gryffindor', 'Gryffindor', 'Gryffindor', 'Ravenclaw', 'Slytherine'],    # Qualitative
    'Age': [15, 16, 15, 17, 14, 16],                                 # Quantitative
    'Score': [90000, 80000, 75000, 50000, 62000, 68000]             # Quantitative
}

df = pd.DataFrame(data)
df.head()
```

	Name	Gender	House	Age	Score
0	Harry	Male	Gryffindor	15	90000
1	Ron	Male	Gryffindor	16	80000
2	Hermione	Female	Gryffindor	15	75000
3	Neville	Male	Gryffindor	17	50000
4	Luna	Female	Ravenclaw	14	62000

```python
# --- QUALITATIVE ANALYSIS ---
print("Qualitative Analysis:")
print(df['Gender'].value_counts())      # Frequency of categories
print(df['House'].value_counts())  # Frequency of departments

# Bar chart for House distribution
df['House'].value_counts().plot(kind='bar', color=['cyan','Magenta'])
plt.title("House Distribution")
plt.xlabel("House")
plt.ylabel("Count")
plt.show()
```

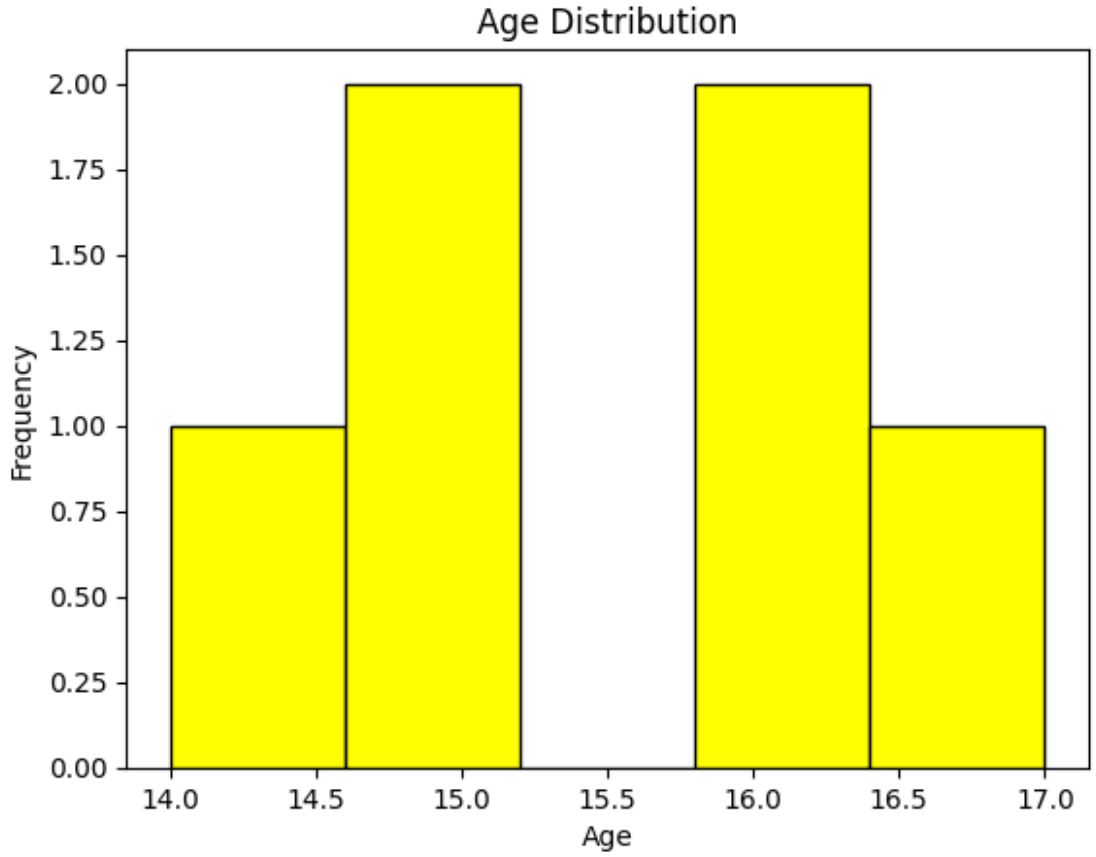
```
Qualitative Analysis:
Gender
Male      4
Female    2
Name: count, dtype: int64
House
Gryffindor    4
Ravenclaw     1
Slytherine    1
Name: count, dtype: int64
```

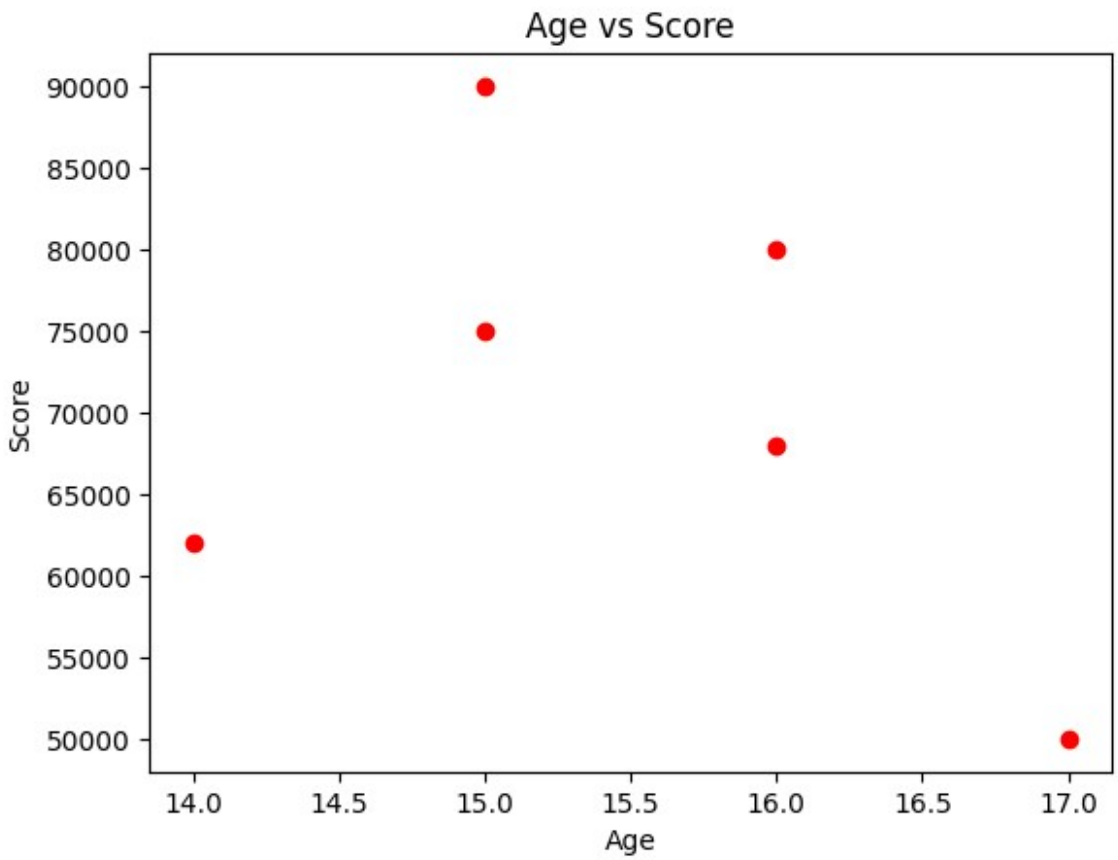



```
# --- QUANTITATIVE ANALYSIS ---
print("\nQuantitative Analysis:")
print(df[['Age', 'Score']].describe())  # Summary statistics

# Histogram for Age
df['Age'].plot(kind='hist', bins=5, color='yellow', edgecolor='black')
plt.title("Age Distribution")
plt.xlabel("Age")
plt.ylabel("Frequency")
plt.show()

# Scatter plot: Age vs Score
plt.scatter(df['Age'], df['Score'], color='red')
plt.title("Age vs Score")
plt.xlabel("Age")
plt.ylabel("Score")
plt.show()
```

```
Quantitative Analysis:
```

```
             Age         Score
count   6.000000      6.000000
mean   15.500000  70833.333333
std     1.048809  14062.953696
min    14.000000  50000.000000
25%    15.000000  63500.000000
50%    15.500000  71500.000000
75%    16.000000  78750.000000
max    17.000000  90000.000000
```




Age vs Score
90000
85000
80000
75000
70000
65000
60000
55000
50000
Score
14.0
14.5
15.0
15.5
16.0
16.5
17.0
Age