

In [2]: *# Question 1*

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

df = pd.read_csv('grade.csv')
df.head()
```

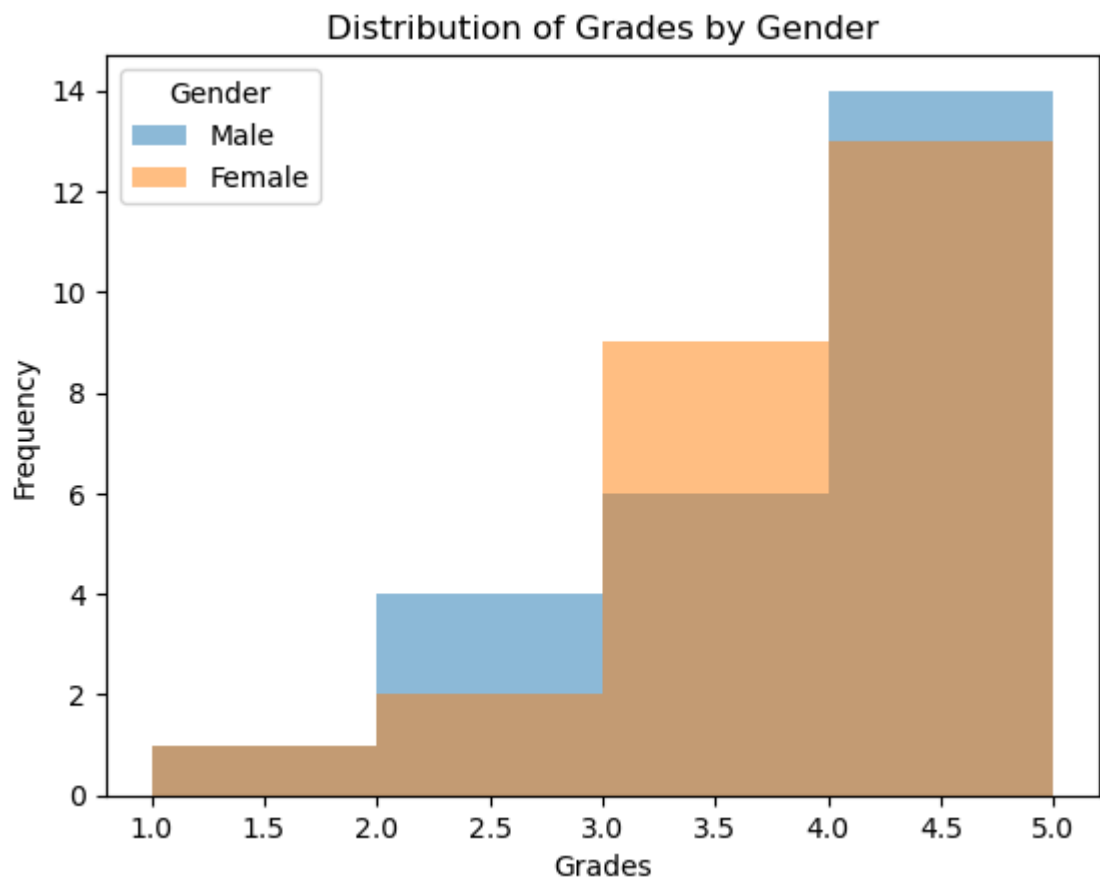
Out [2]:

	id	msex	csex	grade
0	1	Male	1	3
1	2	Male	1	4
2	3	Male	1	5
3	4	Male	1	3
4	5	Male	1	2

```
In [8]: male_grades = df[df['msex'] == 'Male']['grade']
female_grades = df[df['msex'] == 'Female']['grade']

plt.hist(male_grades, bins=range(1, 6), alpha = 0.5, label='Male')
plt.hist(female_grades, bins=range(1, 6), alpha = 0.5, label='Female')

plt.title("Distribution of Grades by Gender")
plt.xlabel("Grades")
plt.ylabel("Frequency")
plt.legend(title="Gender")
plt.show()
```



In [16]: *# Question 2*

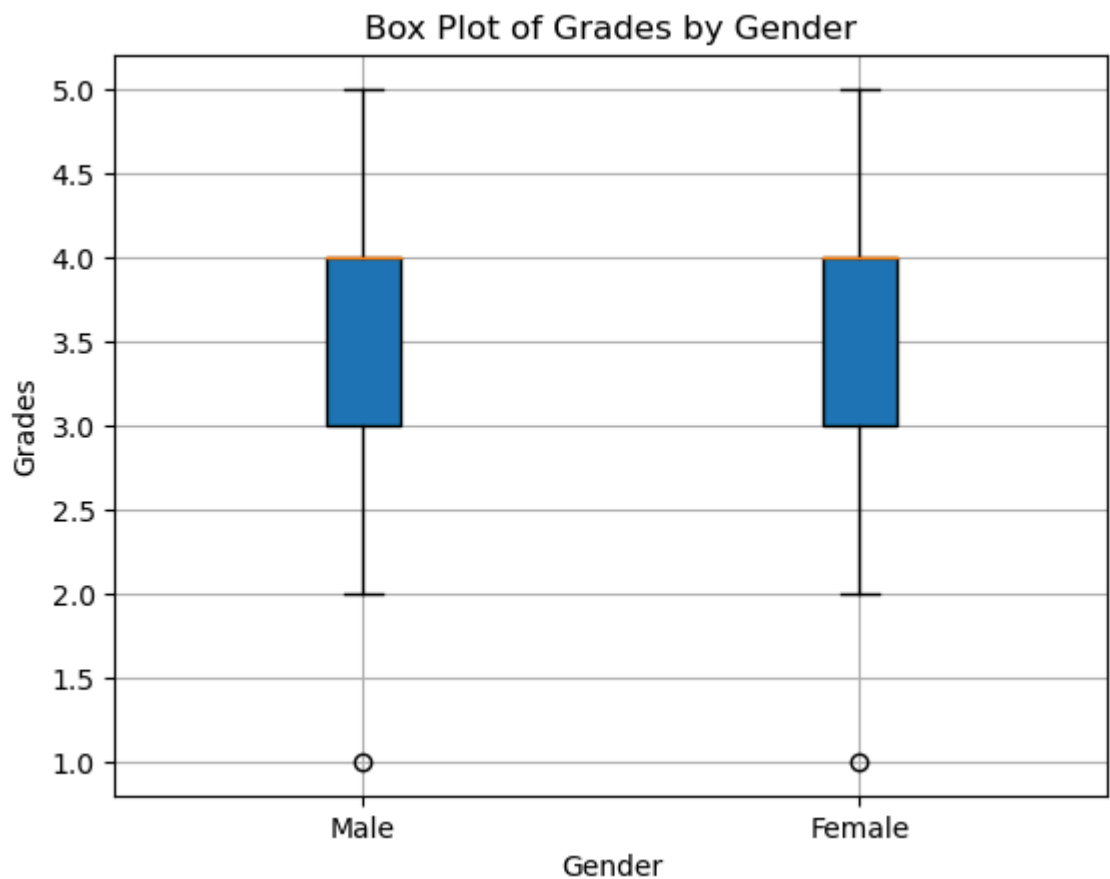
```
import pandas as pd
import matplotlib.pyplot as plt

df = pd.read_csv('grade.csv')

data = [df[df['msex'] == 'Male']['grade'], df[df['msex'] == 'Female']]

plt.boxplot(data, labels=['Male', 'Female'], patch_artist = True)

plt.title("Box Plot of Grades by Gender")
plt.xlabel("Gender")
plt.ylabel("Grades")
plt.grid()
plt.show()
```



In [ ]: