Shweta_Shinde_Math_Assignment3

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MSDA, SJSU , Data 220- Math Method for DA

[3]:
```
import matplotlib.pyplot as plt
import pandas as pd

#Load the file
grade = pd.read_csv(r'F:\grade.csv')
```

1.Draw histograms for "Grades" by "Gender (Male and Female)" with title, xlabel, and ylabel. (5 pts)

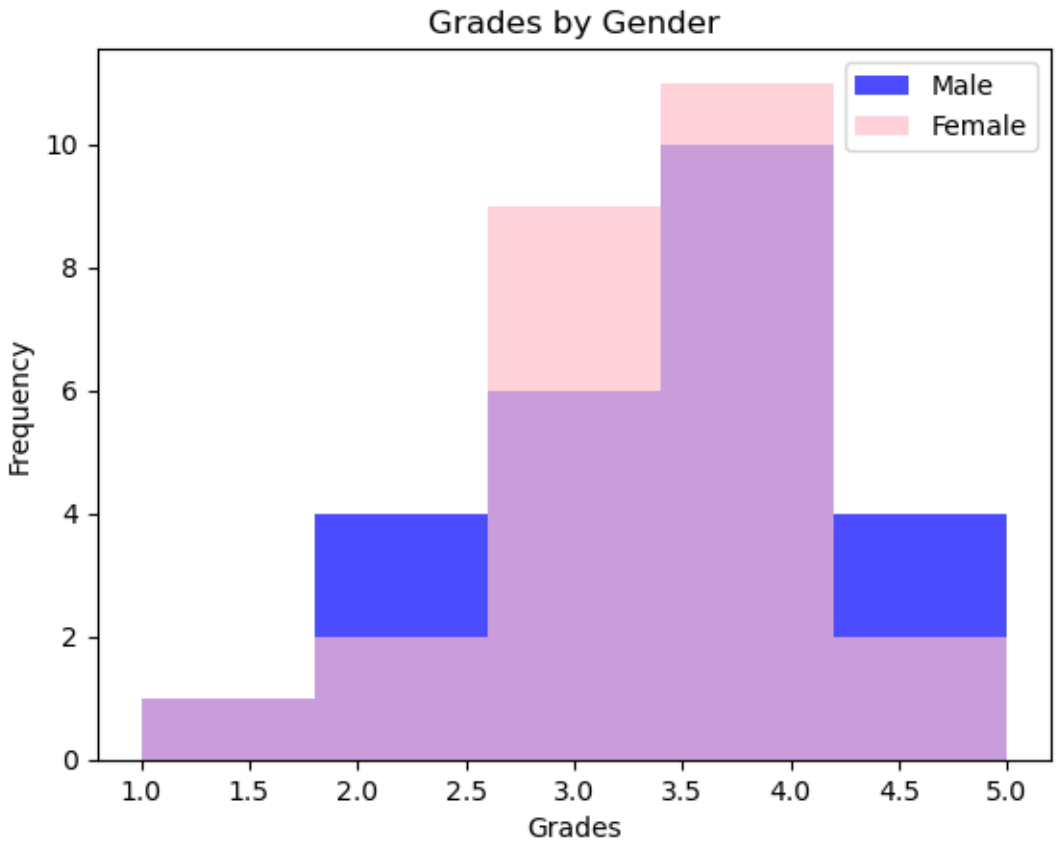
[7]:
```
# Adjust column names based on your actual data
grades_male = grade[grade['msex'] == 'Male']['grade']
grades_female = grade[grade['msex'] == 'Female']['grade']

# Create histograms
plt.hist(grades_male, alpha=0.7, label='Male', bins=5, color='blue')
plt.hist(grades_female, alpha=0.7, label='Female', bins=5, color='pink')

# Add titles and labels
plt.title('Grades by Gender')
plt.xlabel('Grades')
plt.ylabel('Frequency')

# Add legend
plt.legend()

# Show plot
plt.show()
```



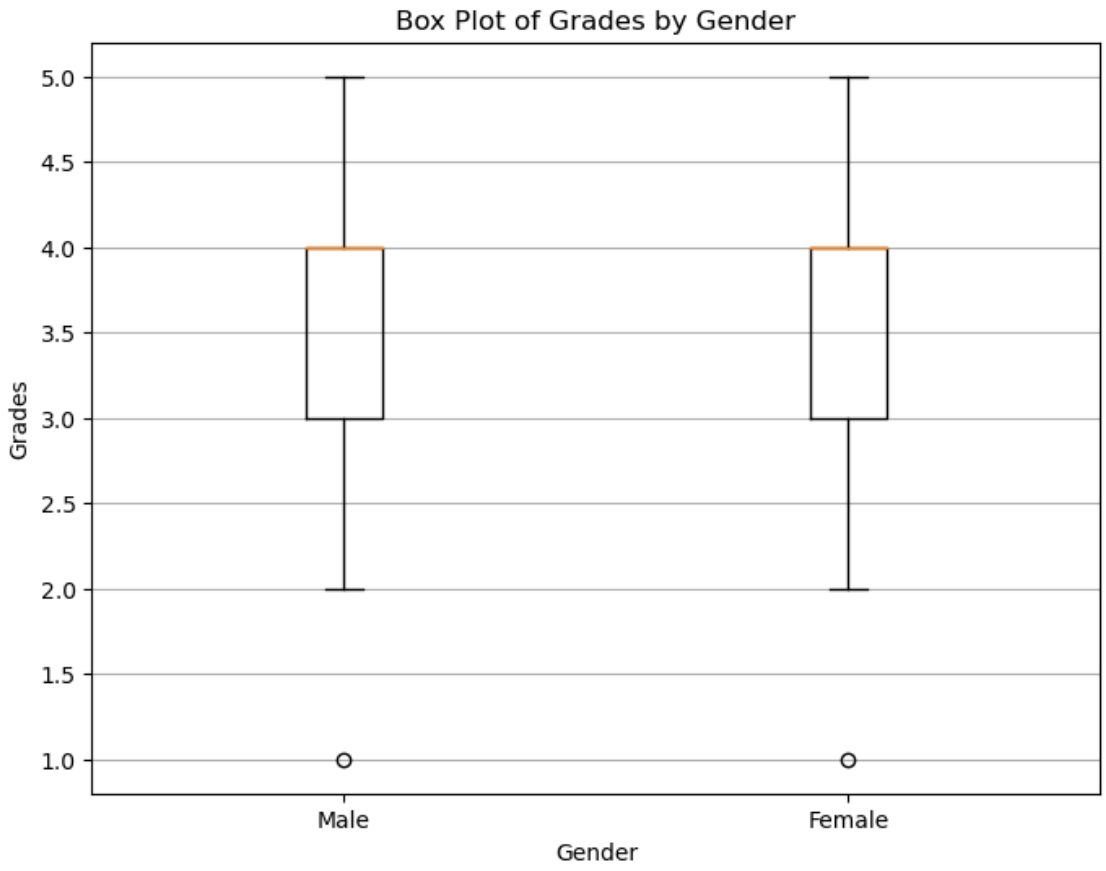
2.Draw a box plot of Grades by Gender (Male and Female) on the same figure with title, xlabel, and ylabel included. (5 pts)

[9]:
```
# Create a box plot
plt.figure(figsize=(8, 6))
plt.boxplot([grade[grade['msex'] == 'Male']['grade'],
             grade[grade['msex'] == 'Female']['grade']],
            labels=['Male', 'Female'])

# Add titles and labels
plt.title('Box Plot of Grades by Gender')
plt.xlabel('Gender')
plt.ylabel('Grades')

# Show grid
plt.grid(axis='y', alpha=1)

# Show the plot
plt.show()
```


Box Plot of Grades by Gender
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
Grades
Male
Female
Gender

[ ]: