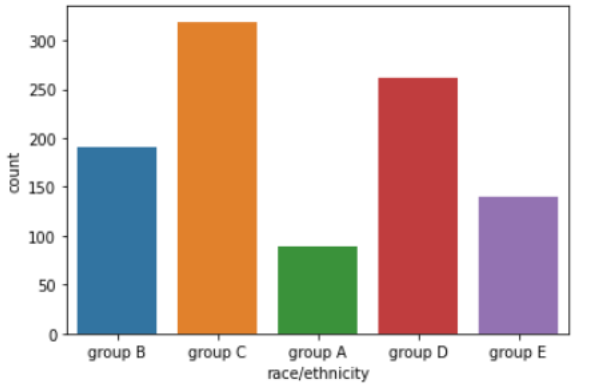
Assignment:1.2

1. By the graph, we can say that Group c has max number of students.

number of students in each race/ethnicity group

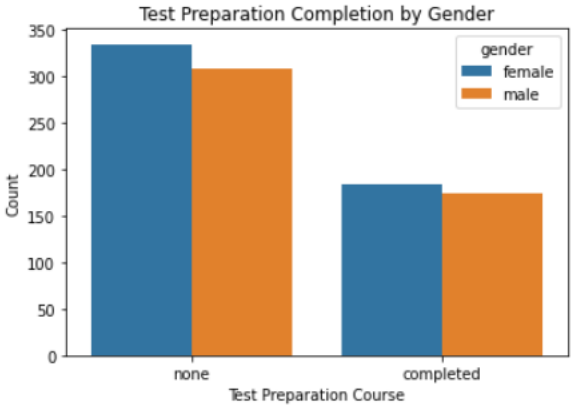
```
[ ]  sns.countplot(x='race/ethnicity', data=df)
```

```
<AxesSubplot:xlabel='race/ethnicity', ylabel='count'>
```



2. Test Preparation Completion by Gender. From the plot we can say most of them didn't complete the test preparation.

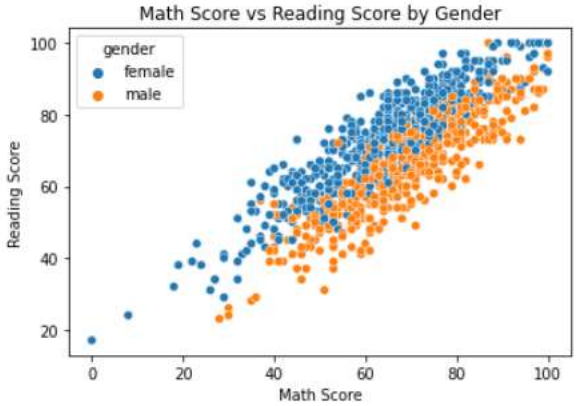
```
[ ]  import pandas as pd
     import matplotlib.pyplot as plt
     import seaborn as sns

     # Create a barplot
     sns.countplot(data=data, x="test preparation course", hue="gender")
     plt.title("Test Preparation Completion by Gender")
     plt.xlabel("Test Preparation Course")
     plt.ylabel("Count")
     plt.show()
```



3.Math Score vs Reading Score by gender:

Female score better than male score

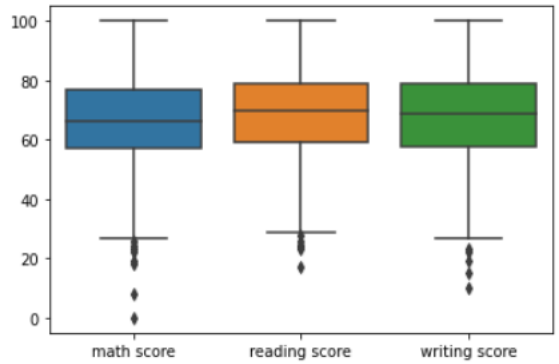
```
[ ]  import pandas as pd
     import matplotlib.pyplot as plt
     import seaborn as sns


     # Create a scatterplot
     sns.scatterplot(data=data, x="math score", y="reading score", hue="gender")
     plt.title("Math Score vs Reading Score by Gender")
     plt.xlabel("Math Score")
     plt.ylabel("Reading Score")
     plt.show()
```



4.Boxplots for different scores

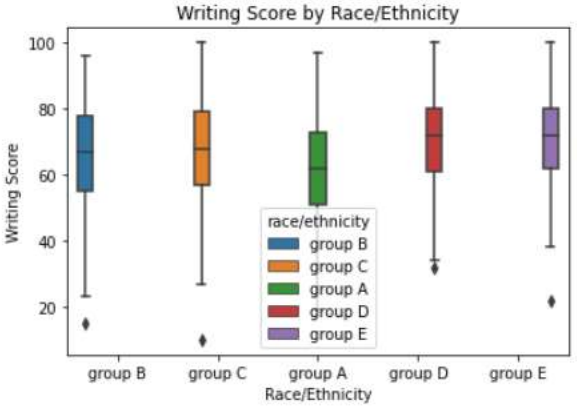
```
sns.boxplot(data=df[['math score', 'reading score', 'writing score']])
```

```
<AxesSubplot:>
```



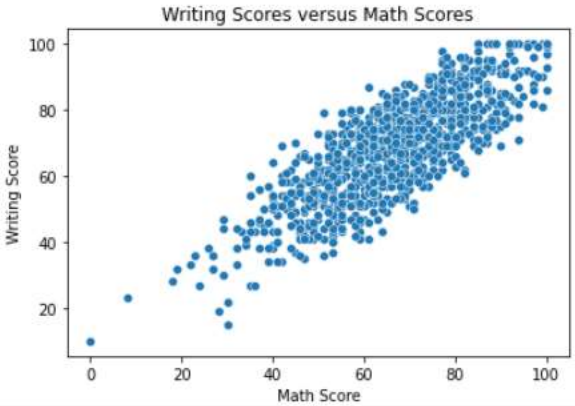
5.Writing Score by Race/Ethnicity

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

     # Create a boxplot
     sns.boxplot(data=data, x="race/ethnicity", y="writing score", hue="race/ethnicity")
     plt.title("Writing Score by Race/Ethnicity")
     plt.xlabel("Race/Ethnicity")
     plt.ylabel("Writing Score")
     plt.show()
```



6.Writing Score versus Math Score

```
[18] import seaborn as sns
     import matplotlib.pyplot as plt
     sns.scatterplot(x='math score', y='writing score', data=data)
     plt.title('Writing Scores versus Math Scores')
     plt.xlabel('Math Score')
     plt.ylabel('Writing Score')
     plt.show()
```



7.Females have performed well than male in writing.

```
[19] import seaborn as sns
     import pandas as pd

     # Create a sample dataset


     # Create the boxplot
     sns.boxplot(x='gender', y='writing score', data=df)
```

```
<AxesSubplot:xlabel='gender', ylabel='writing score'>
```