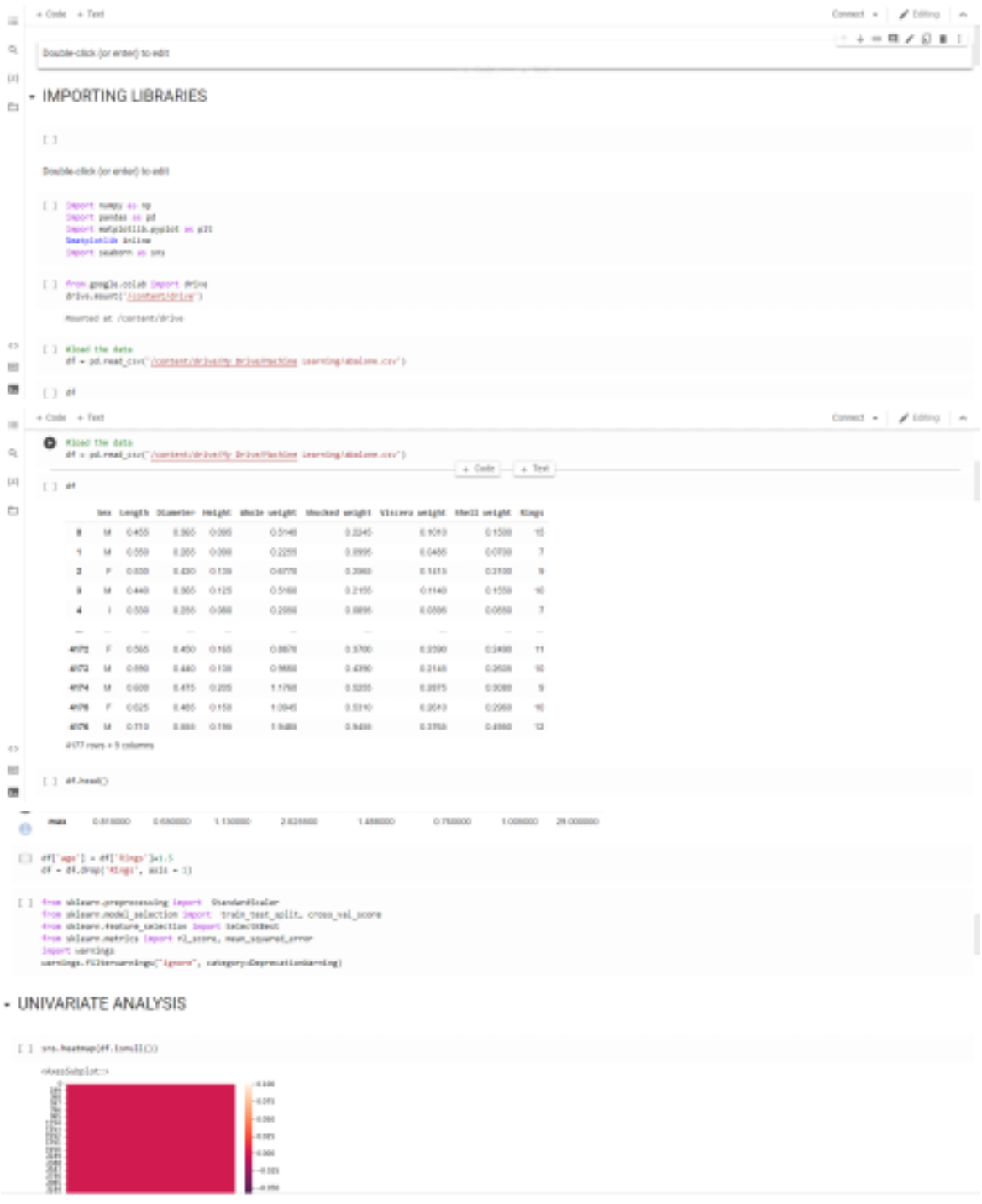
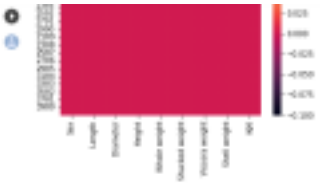
Assignment -4

Assignment Date	03 November 2022
Student Name	Roohi Fathima K.M
Student Roll Number	812419104707
Maximum Marks	2 Marks





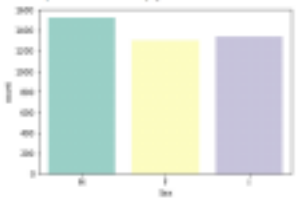
```
[ ] df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 4177 entries, 0 to 4176
Data columns (total 9 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   Sex             4177 non-null   object
 1   Length          4177 non-null   float64
 2   Diameter        4177 non-null   float64
 3   Height          4177 non-null   float64
 4   Whole weight    4177 non-null   float64
 5   Shucked weight  4177 non-null   float64
 6   Viscera weight  4177 non-null   float64
 7   Shell weight    4177 non-null   float64
 8   Age             4177 non-null   float64
dtypes: float64(8), object(1)
memory usage: 293.8+ KB
```

```
[ ]  5   Viscera weight  4177 non-null   float64
     7   Shell weight    4177 non-null   float64
     8   Age             4177 non-null   float64
dtypes: float64(8), object(1)
memory usage: 293.8+ KB
```

```
[ ] sns.countplot(x = 'Sex', data = df, palette = 'bwr')
```

```
<AxesSubplot:xlabel='Sex', ylabel='count'>
```



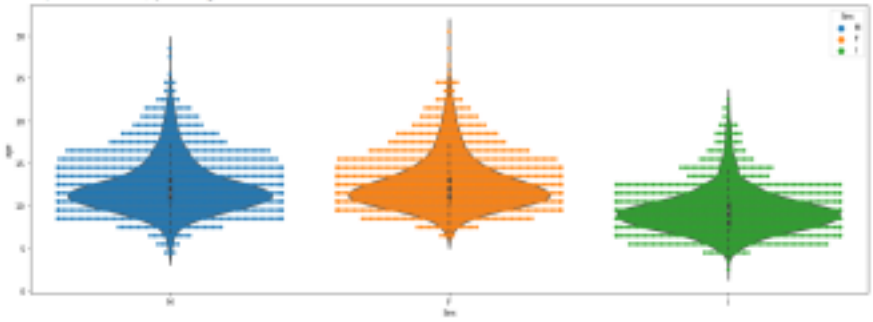
```
[ ] plt.figure(figsize = (10,7))
    sns.boxplot(x = 'Sex', y = 'age', data = df, hue = 'Sex')
    sns.violinplot(x = 'Sex', y = 'age',data = df)

    C:\Users\Harini Vianaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 50.2% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.
      warnings.warn(msg, UserWarning)
    C:\Users\Harini Vianaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 52.2% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.
```

+ Code + Text Connect Editing

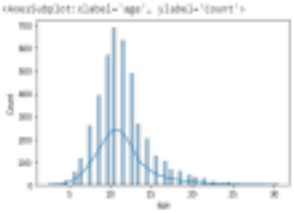

```
    sns.boxplot(x = 'Sex', y = 'age', data = df, hue = 'Sex')
    sns.violinplot(x = 'Sex', y = 'age',data = df)

    C:\Users\Harini Vianaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 50.2% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.
      warnings.warn(msg, UserWarning)
    C:\Users\Harini Vianaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 52.2% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.
      warnings.warn(msg, UserWarning)
    C:\Users\Harini Vianaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 50.1% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.
      warnings.warn(msg, UserWarning)
    <AxesSubplot:xlabel='Sex', ylabel='age'>
```

```
[ ] sns.histplot(df.age,kde=True)
```

```
<AxesSubplot:xlabel='age', ylabel='Count'>
```

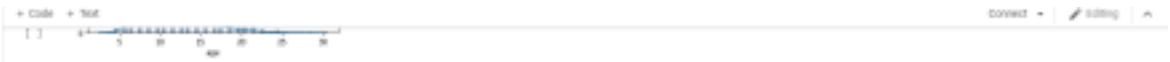


BIVARIATE ANALYSIS

```
[ ] 4 cells hidden
```

MULTI VARIATE ANALYSIS

```
[ ] 1 cell hidden
```



BIVARIATE ANALYSIS

MULTI VARIATE ANALYSIS

MISSING VALUES

OUTLIERS

CATEGORICAL COLUMNS

SCALING THE INDEPENDENT VARIABLE

SPLITING THE DATA

BUILDING MODEL

TRAINING THE MODEL

TESTING THE MODEL