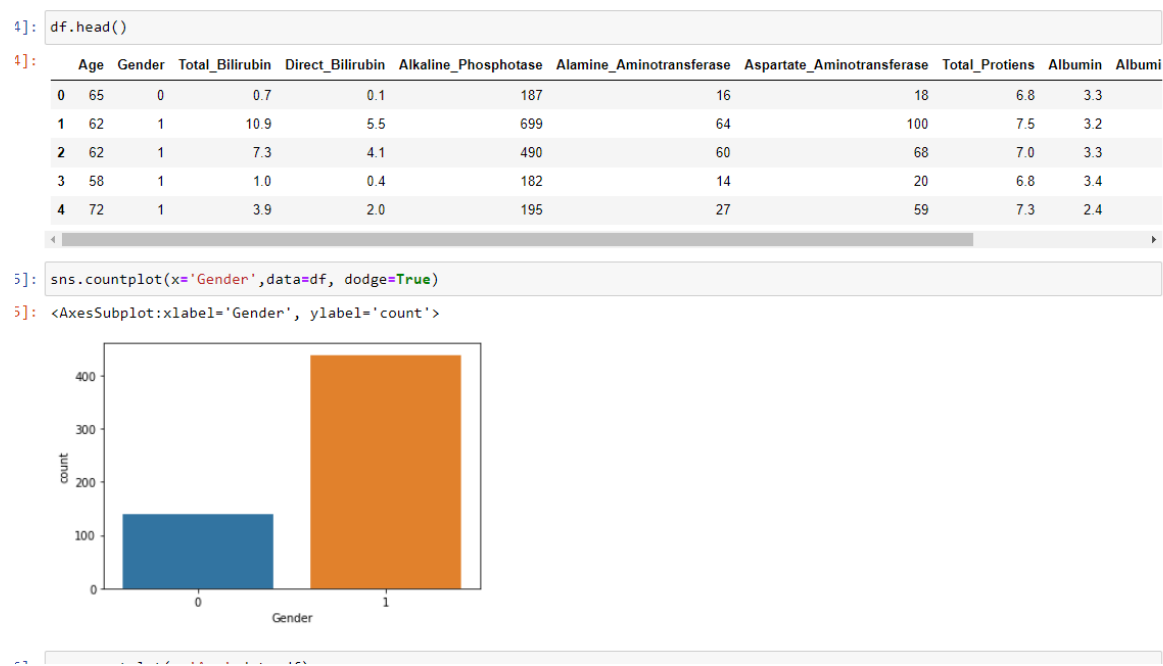


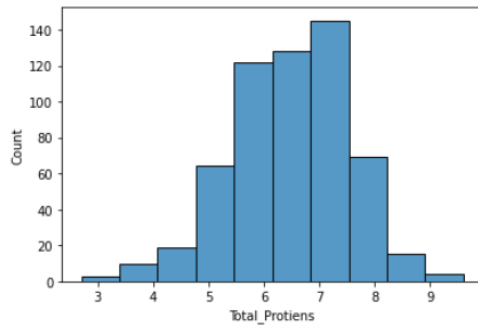
Team ID	PNT2022TMID52707
Project Name	Statistical Machine Learning Approaches to Liver Disease Prediction.

Exploratory Data Analysis

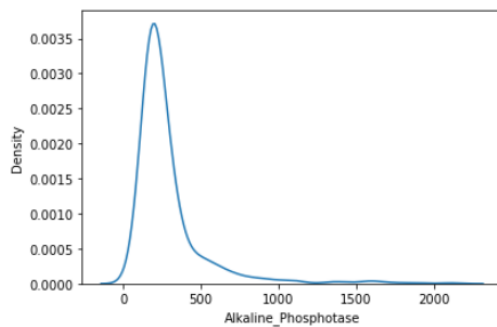
Uni –variate Analysis:



```
: sns.histplot(x='Total_Protiens',data=df,bins=10)
: <AxesSubplot:xlabel='Total_Protiens', ylabel='Count'>
```



```
: sns.kdeplot(x='Alkaline_Phosphotase', data=df)
: <AxesSubplot:xlabel='Alkaline_Phosphotase', ylabel='Density'>
```



```
: sns.boxplot(x='Albumin_and_Globulin_Ratio',data=df)
```

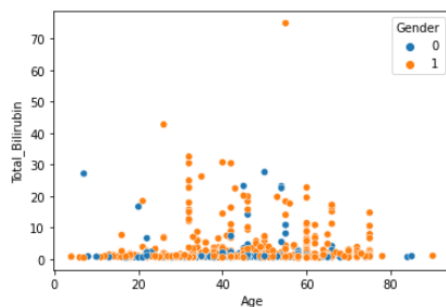
Bi – variate Analysis:

```
: df.head()
```

	Age	Gender	Total_Bilirubin	Direct_Bilirubin	Alkaline_Phosphotase	Alamine_Aminotransferase	Aspartate_Aminotransferase	Total_Protiens	Albumin	Albumi
0	65	0	0.7	0.1	187	16	18	6.8	3.3	
1	62	1	10.9	5.5	699	64	100	7.5	3.2	
2	62	1	7.3	4.1	490	60	68	7.0	3.3	
3	58	1	1.0	0.4	182	14	20	6.8	3.4	
4	72	1	3.9	2.0	195	27	59	7.3	2.4	

```
: sns.scatterplot(x='Age',y='Total_Bilirubin',data=df,hue='Gender')
```

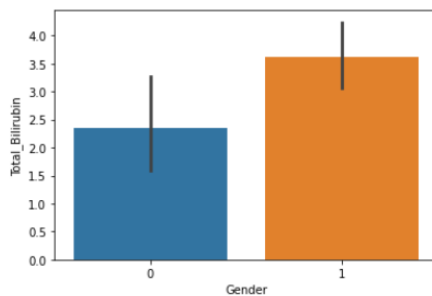
```
: <AxesSubplot:xlabel='Age', ylabel='Total_Bilirubin'>
```



```
: sns.barplot(x='Gender',y='Total_Bilirubin',data=df)
```

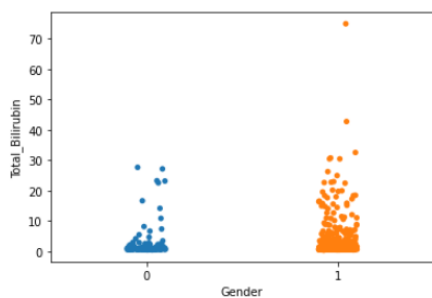
```
: sns.barplot(x='Gender',y='Total_Bilirubin',data=df)
```

```
: <AxesSubplot:xlabel='Gender', ylabel='Total_Bilirubin'>
```



```
: sns.stripplot(x='Gender',y='Total_Bilirubin',data=df)
```

```
: <AxesSubplot:xlabel='Gender', ylabel='Total_Bilirubin'>
```



Multi – variate Analysis:

```
: sns.pairplot(data=df,hue='Gender')
```

```
: <seaborn.axisgrid.PairGrid at 0x22f6cbfda90>
```

