

Task 1

```
===== RESTART: D:\python
Mean: 29.69911764705882
Median: 14.4542
Mode: 0      S
Name: Embarked, dtype: object
      Mean  Median  Mode
Pclass
1      84.154687  60.2875  26.55
2      20.662183  14.2500  13.00
3      13.675550   8.0500   8.05
sMean      0.523008
sMedian      0.000000
Name: SibSp, dtype: float64
|
```


Skewness and kurtosis

```
===== RESTART: D:\python\sprint3\task3.py
4.787316519674893 is positive
Lepto Distribution
2.7491170471010933 Not Symmetrically Distributed
0.4785234382949897 is not Symmetrically Distributed
-1.775004671066304 is not Symmetrically Distributed
Kurtosis fare have an Extreme Value
skewness fare have an Extreme Value
```

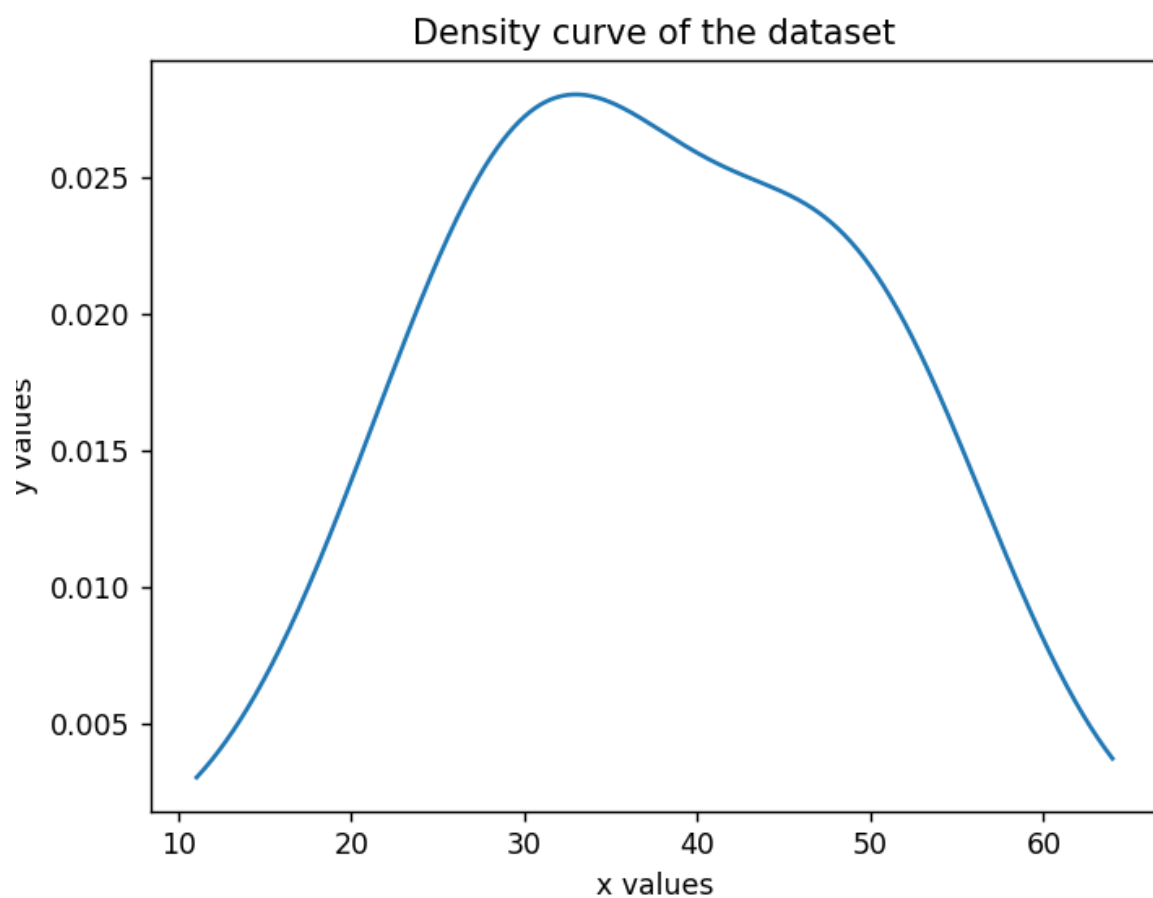
Task 2

```
===== RESTART: D:\python\sprint3\task3.py
exp  salary  standardized_exp  standardized_salary
0    1    1000        -1.414214        -1.408365
1    2    2500        -0.707107        -0.679900
2    3    4000         0.000000         0.048564
3    4    5000         0.707107         0.534207
4    5    7000         1.414214         1.505493
Mean of standardized_exp: 0.0
Std of standardized_exp: 0.9999999999999999
Mean of standardized_salary: 0.0
Std of standardized_salary: 1.0
|
```

Task 3

===== RESTART: 

```
values
0  47.354287
1  24.288587
2  31.905409
3  34.518412
4  50.757214
Mean: values    37.764782
dtype: float64
Median: values   34.518412
dtype: float64
```



Task 4

Program 1

```

===== RESTART: D:\python\sprints\task3.py =====
Z_score: 2.308
Z_critical: 1.960
CI: 1.274
Upper: 170.774
Lower: 168.226
Reject Null hypothesis, there is an difference in height
|

```

Program 2

```

Confidence Level: 80%
z_critical: 40.282
Confidence Interval: 35.667
Lower_limit: -3.667
Upper_Limit: 67.667

Confidence Level: 90%
z_critical: 40.645
Confidence Interval: 35.988
Lower_limit: -3.988
Upper_Limit: 67.988

Confidence Level: 98%
z_critical: 41.326
Confidence Interval: 36.592
Lower_limit: -4.592
Upper_Limit: 68.592

```

Task 5

Program 1

```

===== RESTART: D:\python\sprints\task3.py :
t_statistics: 12.160
p_value: 0.000
DF: 29
Reject Null Hypothesis, There is effect in New Medication
|

```

Program 2

```
===== RESTAF  
t_critical : 2.145  
lower : 18.062  
upper : 21.938
```