**4.How to calculate Skewness and Kurtosis for a data set in python?**

**Objective:**

* To calculate the skewness and kurtosis for a sample data set using python.

**Process:**

* Skewness:

It represents the shape of the distribution.

Skewness can be quantified to define the extent to which a distribution differs from a normal distribution.

For calculating skewness by using **df.skew()** python inbuilt function.

* Kurtosis

Kurtosis is the measure of thickness or heaviness of the given distribution.

Its actually represents the height of the distribution.

The distribution with kurtosis equal to 3 is known as mesokurtic. A random variable which follows normal distribution has kurtosis 3.

If the kurtosis is less than three, the distribution is called as platykurtic. Here, the distribution has shorter and thinner tails than normal distribution.

If the kurtosis is greater than three, the distribution is called as leptykurtic. Here, the distribution has longer and fatter tails than normal distribution.

For calculating kurtosis by using **df.kurtosis()** python inbuilt function.

**Input:**

Data set(CSV file)

**Output:**

The value of skewness and kurtosis for the sample data set.

**Source code:**

#import pandas library

import pandas as pd

#Read the data set

data=pd.read\_csv('/home/soft27/soft27/Sathish/Pythonfiles/

Employee.csv')

#creating data frame

df=pd.DataFrame(data)

print("The value of Skewness is:")

#calculating the skewness

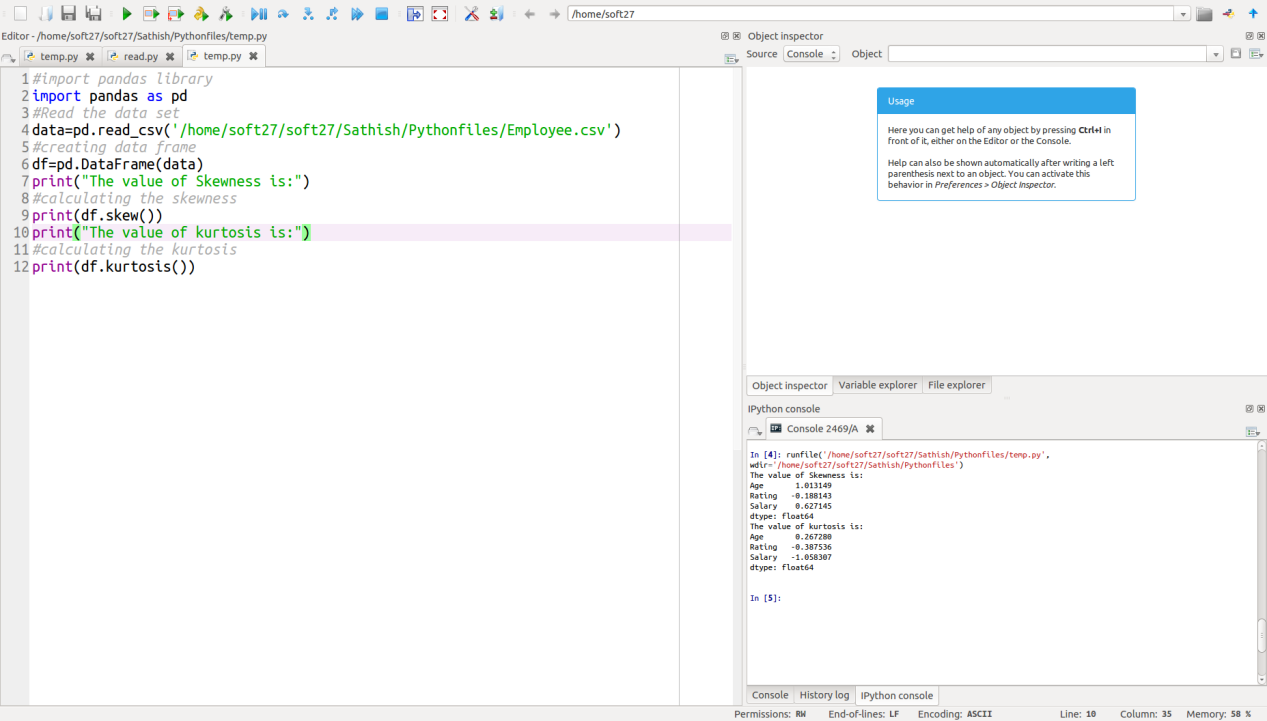
print(df.skew())

print("The value of kurtosis is:")

#calculating the kurtosis

print(df.kurtosis())

**Screen Shot:**

****