## **Statistical Description**

Experiment no.: 4

Aim: Statistical Description

```
In [1]: #Name: Prapti Pramod Ugale
         #Roll no.: 73
         #Subject: Data Science and Statistics (Lab 1)
         #Date: 25/07/2023
 In [2]: import pandas as pd
 In [3]: import matplotlib.pyplot as plt
 In [4]: import seaborn as sns
 In [5]: import numpy as np
 In [6]: import os
 In [7]: os.getcwd()
 Out[7]: 'C:\\Users\\hp\\Downloads'
 In [8]: os.chdir('C:\\Users\\hp\\Desktop')
 In [9]: df=pd.read_csv("Salary_dataset.csv")
In [10]: df.head()
Out[10]:
            Unnamed: 0 YearsExperience
                                          Salary
          0
                      0
                                    1.2 39344.0
                                    1.4 46206.0
          1
          2
                      2
                                    1.6 37732.0
                                    2.1 43526.0
          3
          4
                      4
                                    2.3 39892.0
In [11]: df.tail()
```

Out[11]:		Unnamed: 0	YearsExperience	Salary
	25	25	9.1	105583.0
	26	26	9.6	116970.0
	27	27	9.7	112636.0
	28	28	10.4	122392.0
	29	29	10.6	121873.0

In [12]: df.head(30)

Out[12]:		Unnamed: 0	YearsExperience	Salary
,	0	0	1.2	39344.0
	1	1	1.4	46206.0
	2	2	1.6	37732.0
	3	3	2.1	43526.0
	4	4	2.3	39892.0
	5	5	3.0	56643.0
	6	6	3.1	60151.0
	7	7	3.3	54446.0
	8	8	3.3	64446.0
	9	9	3.8	57190.0
	10	10	4.0	63219.0
	11	11	4.1	55795.0
	12	12	4.1	56958.0
	13	13	4.2	57082.0
	14	14	4.6	61112.0
	15	15	5.0	67939.0
	16	16	5.2	66030.0
	17	17	5.4	83089.0
	18	18	6.0	81364.0
	19	19	6.1	93941.0
	20	20	6.9	91739.0
	21	21	7.2	98274.0
	22	22	8.0	101303.0
	23	23	8.3	113813.0
	24	24	8.8	109432.0
	25	25	9.1	105583.0
	26	26	9.6	116970.0
	27	27	9.7	112636.0
	28	28	10.4	122392.0
	29	29	10.6	121873.0

In [13]: df.info()
#attribute

<class 'pandas.core.frame.DataFrame'>

RangeIndex: 30 entries, 0 to 29 Data columns (total 3 columns):

# Column Non-Null Count Dtype
--- ----0 Unnamed: 0 30 non-null int64
1 YearsExperience 30 non-null float64
2 Salary 30 non-null float64

dtypes: float64(2), int64(1)
memory usage: 852.0 bytes

In [14]: df.describe()

#record

Out[14]: Unnamed: 0 YearsExperience Salary

	Officialitied. U	rearsexperience	Salai y
count	30.000000	30.000000	30.000000
mean	14.500000	5.413333	76004.000000
std	8.803408	2.837888	27414.429785
min	0.000000	1.200000	37732.000000
25%	7.250000	3.300000	56721.750000
50%	14.500000	4.800000	65238.000000
75%	21.750000	7.800000	100545.750000
max	29.000000	10.600000	122392.000000

In [15]: df.shape

Out[15]: (30, 3)

In [16]: df.size

Out[16]: 90

In [17]: df.ndim

Out[17]: **2**