

Statistical Description

Experiment no.: 4

Aim: Statistical Description

```
In [1]: #Name: Swapnil Rahul Wankhade  
#Roll no.: 73  
#Sec: B  
#Subject: Data Science and Statistics (Lab 1)
```

```
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	1	1.4	46206.0
2	2	1.6	37732.0
3	3	2.1	43526.0
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
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
```