November 1, 2023

1 Statistical Description

Experiment no.: 4

Aim: Statistical Description

[1]:
```
#Name: Vedant Wankhade
#Roll no.: 74
#Sec: B
#Subject: Data Science and Statistics (Lab 1)
```

[2]:
```
import pandas as pd
```

[3]:
```
import matplotlib.pyplot as plt
```

[4]:
```
import seaborn as sns
```

[5]:
```
import numpy as np
```

[6]:
```
import os
```

[7]:
```
os.getcwd()
```

[7]:
```
'C:\\Users\\hp\\Downloads'
```

[8]:
```
os.chdir('C:\\Users\\hp\\Desktop')
```

[9]:
```
df=pd.read_csv("Salary_dataset.csv")
```

[10]:
```
df.head()
```

[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

[11]:
```
df.tail()
```

[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

[12]:
```
df.head(30)
```

[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

[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
```

[14]:
```
df.describe()
#record
```

[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

[15]:
```
df.shape
```

[15]:
```
(30, 3)
```

[16]:
```
df.size
```

[16]:
```
90
```

[17]:
```
df.ndim
```

[17]:
```
2
```