3-statistical-description-aniket

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1 Statistical Description

```
Experiment no.: 3
     Aim: Statistical Description
 [1]: #Name: Aniket Khatkhede
      #Roll no.: 63
      #Sec: A
      #Subject: Data Science and Statistics (Lab 1)
 [2]: import pandas as pd
 [3]: import matplotlib.pyplot as plt
 [4]: import seaborn as sns
      import numpy as np
 [6]: import os
 [7]:
      os.getcwd()
 [7]: 'C:\\Users\\hp\\Downloads'
      os.chdir('C:\\Users\\hp\\Desktop')
 [9]: df=pd.read_csv("Salary_dataset.csv")
[10]: df.head()
[10]:
         Unnamed: 0 YearsExperience
                                       Salary
                  0
                                 1.2 39344.0
      0
      1
                  1
                                 1.4 46206.0
      2
                  2
                                 1.6 37732.0
      3
                  3
                                 2.1 43526.0
                                 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
                                          39344.0
      0
                    0
                                    1.2
      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
                                          60151.0
                                   3.1
                    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
                                          55795.0
                   11
                                   4.1
      12
                   12
                                   4.1
                                          56958.0
      13
                   13
                                   4.2
                                          57082.0
      14
                   14
                                   4.6
                                          61112.0
      15
                   15
                                   5.0
                                          67939.0
                                   5.2
      16
                                          66030.0
                   16
      17
                   17
                                   5.4
                                          83089.0
                                          81364.0
      18
                                   6.0
                   18
      19
                   19
                                   6.1
                                          93941.0
      20
                   20
                                   6.9
                                          91739.0
      21
                                   7.2
                                          98274.0
                   21
      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
                                   9.6 116970.0
                   26
      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