```
In [1]:
            #Aim : To perform Finding Statistical Descriptions of given data set using Pandas.
 In [ ]:
            #Name: Achal Subhash Kharwade
            #Roll No: 36
            #Sec: B
            #Date :02-09-2023
 In [3]:
            import pandas as pd
            import os
            os.getcwd()
           'C:\\Users\\Lenovo\\DSS 5th Sem'
 Out[3]:
In [17]:
            os.chdir("D:\DSS\DSS PRAC PG")
 In [5]:
            df=pd.read_csv('diabetes.csv')
            df.head(10)
              Pregnancies Glucose BloodPressure SkinThickness Insulin BMI DiabetesPedigreeFunction Age
                                                                                                             Outcome
 Out[5]:
           0
                        6
                               148
                                               72
                                                              35
                                                                      0 33.6
                                                                                                  0.627
                                                                                                         50
                                                                                                                    1
                        1
                                85
                                               66
                                                              29
                                                                       0 26.6
                                                                                                 0.351
                                                                                                         31
                                                                                                                    0
           2
                        8
                                                              0
                                                                                                         32
                               183
                                               64
                                                                      0 23.3
                                                                                                 0.672
                                                                                                                    1
           3
                        1
                                                              23
                                89
                                               66
                                                                     94 28.1
                                                                                                 0.167
                                                                                                         21
                                                                                                                    0
                        0
                               137
                                               40
                                                              35
                                                                     168 43.1
                                                                                                 2.288
                                                                                                         33
                                                                                                                    1
                        5
                               116
                                                              0
                                                                      0 25.6
                                                                                                 0.201
                                                                                                         30
                                                                                                                    0
           5
                                               74
           6
                        3
                                78
                                               50
                                                              32
                                                                     88 31.0
                                                                                                 0.248
                                                                                                         26
                                                                                                                    1
                       10
                               115
                                                0
                                                                      0 35.3
                                                                                                 0.134
                                                                                                         29
                                                                                                                    0
                        2
                               197
                                                              45
                                                                                                 0.158
           8
                                               70
                                                                     543 30.5
                                                                                                         53
                                                                                                                    1
                        8
                               125
                                                               0
                                                                      0.0
                                                                                                  0.232
                                                                                                         54
                                                                                                                    1
 In [6]:
            df.tail()
                                     {\bf BloodPressure} \quad {\bf SkinThickness} \quad {\bf Insulin} \quad {\bf BMI} \quad {\bf DiabetesPedigreeFunction} \quad {\bf Age}
                Pregnancies
                             Glucose
                                                                                                               Outcome
 Out[6]:
           763
                                 101
                                                                           32.9
                                                                                                           63
                                                                                                                      0
                         10
                                                                       180
                                                                                                    0.171
           764
                          2
                                 122
                                                                27
                                                                         0 36.8
                                                                                                                      0
                                                 70
                                                                                                    0.340
                                                                                                           27
           765
                          5
                                 121
                                                 72
                                                                23
                                                                       112 26.2
                                                                                                    0.245
                                                                                                           30
                                                                                                                      0
           766
                                 126
                                                 60
                                                                         0 30.1
                                                                                                    0.349
                                                                                                           47
                                                                                                                       1
                                                 70
                                                                                                                      0
           767
                          1
                                                                31
                                                                         0 304
                                                                                                    0.315
                                                                                                           23
                                  93
 In [8]:
            df.shape
           (768, 9)
 Out[8]:
 In [9]:
            df.size
           6912
 Out[9]:
In [10]:
            df.ndim
Out[10]:
In [11]:
            df.columns
```

168 43.1

2.288

In [12]:

df.head()

Pregnancies Glucose BloodPressure SkinThickness Insulin BMI DiabetesPedigreeFunction Age Outcome Out[12]: 0 33.6 0.627 0 26.6 0.351 0 23.3 0.672 94 28.1 0.167 

In [13]:

df.drop(labels="Age",axis=1)

Out[13]: Pregnancies Glucose BloodPressure SkinThickness Insulin BMI DiabetesPedigreeFunction Outcome 0 33.6 0.627 0 26.6 0.351 0 23.3 0.672 94 28.1 0.167 168 43.1 2.288 180 32.9 0.171 0 36.8 0.340 112 26.2 0.245 0 30.1 0.349 0 30.4 0.315 

768 rows × 8 columns

In [14]:

df.drop(labels=["Age","Glucose"],axis=1)

Out[14]:

|     | Pregnancies | BloodPressure | SkinThickness | Insulin | вмі  | DiabetesPedigreeFunction | Outcome |
|-----|-------------|---------------|---------------|---------|------|--------------------------|---------|
| 0   | 6           | 72            | 35            | 0       | 33.6 | 0.627                    | 1       |
| 1   | 1           | 66            | 29            | 0       | 26.6 | 0.351                    | 0       |
| 2   | 8           | 64            | 0             | 0       | 23.3 | 0.672                    | 1       |
| 3   | 1           | 66            | 23            | 94      | 28.1 | 0.167                    | 0       |
| 4   | 0           | 40            | 35            | 168     | 43.1 | 2.288                    | 1       |
|     |             |               |               |         |      |                          |         |
| 763 | 10          | 76            | 48            | 180     | 32.9 | 0.171                    | 0       |
| 764 | 2           | 70            | 27            | 0       | 36.8 | 0.340                    | 0       |
| 765 | 5           | 72            | 23            | 112     | 26.2 | 0.245                    | 0       |
| 766 | 1           | 60            | 0             | 0       | 30.1 | 0.349                    | 1       |
| 767 | 1           | 70            | 31            | 0       | 30.4 | 0.315                    | 0       |

768 rows × 7 columns

In [15]:

df.head(11)

Out[15]:

| : |   | Pregnancies | Glucose | BloodPressure | SkinThickness | Insulin | ВМІ  | DiabetesPedigreeFunction | Age | Outcome |
|---|---|-------------|---------|---------------|---------------|---------|------|--------------------------|-----|---------|
|   | 0 | 6           | 148     | 72            | 35            | 0       | 33.6 | 0.627                    | 50  | 1       |
|   | 1 | 1           | 85      | 66            | 29            | 0       | 26.6 | 0.351                    | 31  | 0       |
|   | 2 | 8           | 183     | 64            | 0             | 0       | 23.3 | 0.672                    | 32  | 1       |
|   |   |             |         |               |               |         |      |                          |     |         |

| 3  | 1  | 89  | 66 | 23 | 94  | 28.1 | 0.167 | 21 | 0 |
|----|----|-----|----|----|-----|------|-------|----|---|
| 4  | 0  | 137 | 40 | 35 | 168 | 43.1 | 2.288 | 33 | 1 |
| 5  | 5  | 116 | 74 | 0  | 0   | 25.6 | 0.201 | 30 | 0 |
| 6  | 3  | 78  | 50 | 32 | 88  | 31.0 | 0.248 | 26 | 1 |
| 7  | 10 | 115 | 0  | 0  | 0   | 35.3 | 0.134 | 29 | 0 |
| 8  | 2  | 197 | 70 | 45 | 543 | 30.5 | 0.158 | 53 | 1 |
| 9  | 8  | 125 | 96 | 0  | 0   | 0.0  | 0.232 | 54 | 1 |
| 10 | 4  | 110 | 92 | 0  | 0   | 37.6 | 0.191 | 30 | 0 |

In [16]:

df.drop(labels=[2,3],axis=0)

| Out[16]: |     | Pregnancies | Glucose | BloodPressure | SkinThickness | Insulin | вмі  | DiabetesPedigreeFunction | Age | Outcome |
|----------|-----|-------------|---------|---------------|---------------|---------|------|--------------------------|-----|---------|
|          | 0   | 6           | 148     | 72            | 35            | 0       | 33.6 | 0.627                    | 50  | 1       |
|          | 1   | 1           | 85      | 66            | 29            | 0       | 26.6 | 0.351                    | 31  | 0       |
|          | 4   | 0           | 137     | 40            | 35            | 168     | 43.1 | 2.288                    | 33  | 1       |
|          | 5   | 5           | 116     | 74            | 0             | 0       | 25.6 | 0.201                    | 30  | 0       |
|          | 6   | 3           | 78      | 50            | 32            | 88      | 31.0 | 0.248                    | 26  | 1       |
|          |     |             |         |               |               |         |      |                          |     |         |
|          | 763 | 10          | 101     | 76            | 48            | 180     | 32.9 | 0.171                    | 63  | 0       |
|          | 764 | 2           | 122     | 70            | 27            | 0       | 36.8 | 0.340                    | 27  | 0       |
|          | 765 | 5           | 121     | 72            | 23            | 112     | 26.2 | 0.245                    | 30  | 0       |
|          | 766 | 1           | 126     | 60            | 0             | 0       | 30.1 | 0.349                    | 47  | 1       |
|          | 767 | 1           | 93      | 70            | 31            | 0       | 30.4 | 0.315                    | 23  | 0       |

766 rows × 9 columns

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js