```
In [17]:
            #EXP -2
In [18]:
            #Aim: To perform of getting basic statastical description of data
In [3]:
            # Name:Anisha Yogendra Mahajan
            # Roll no.: 34
            # Sec:A
            # Subject:ET1
            # Date: 25/08/2025
In [4]:
            import pandas as pd
In [5]:
            import os
In [6]:
            os.getcwd()
           'C:\\Users\\USER'
Out[6]:
In [7]:
            os.chdir("C:\\Users\\USER\\Desktop")
In [8]:
            data=pd.read_csv("diabetes - diabetes.csv.csv")
In [9]:
            data.head(20)
Out[9]:
               Pregnancies Glucose
                                    BloodPressure SkinThickness Insulin
                                                                           BMI DiabetesPedigreeFunction Age
            0
                         6
                                148
                                                72
                                                               35
                                                                        0
                                                                           33.6
                                                                                                    0.627
                                                                                                            5(
            1
                         1
                                 85
                                                66
                                                               29
                                                                           26.6
                                                                                                    0.351
                                                                                                            3
            2
                         8
                                183
                                                64
                                                                0
                                                                        0
                                                                           23.3
                                                                                                            3;
                                                                                                    0.672
            3
                         1
                                 89
                                                66
                                                               23
                                                                       94
                                                                           28.1
                                                                                                    0.167
                                                                                                            2
            4
                         0
                                                               35
                                                                                                    2.288
                                                                                                            3:
                                137
                                                40
                                                                      168
                                                                           43.1
            5
                         5
                                116
                                                74
                                                                0
                                                                           25.6
                                                                                                    0.201
                                                                                                            3(
            6
                         3
                                 78
                                                50
                                                               32
                                                                       88
                                                                           31.0
                                                                                                    0.248
                                                                                                            21
            7
                        10
                                115
                                                 0
                                                                0
                                                                        0
                                                                           35.3
                                                                                                    0.134
                                                                                                            29
            8
                         2
                                197
                                                70
                                                               45
                                                                      543
                                                                           30.5
                                                                                                    0.158
                                                                                                            5
                         8
                                                                0
            9
                                125
                                                96
                                                                        0
                                                                            0.0
                                                                                                    0.232
                                                                                                            54
           10
                                                                0
                         4
                                110
                                                92
                                                                        0
                                                                           37.6
                                                                                                    0.191
                                                                                                            3(
                                                74
                                                                0
                                                                                                    0.537
           11
                        10
                                168
                                                                        0
                                                                           38.0
                                                                                                            34
           12
                        10
                                139
                                                80
                                                                0
                                                                        0
                                                                           27.1
                                                                                                    1.441
                                                                                                            5
                                                               23
           13
                         1
                                189
                                                60
                                                                      846
                                                                           30.1
                                                                                                    0.398
                                                                                                            59
           14
                         5
                                166
                                                72
                                                               19
                                                                      175 25.8
                                                                                                    0.587
                                                                                                            5
```

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	ВМІ	DiabetesPedigreeFunction	Ag
15	7	100	0	0	0	30.0	0.484	37
16	0	118	84	47	230	45.8	0.551	3
17	7	107	74	0	0	29.6	0.254	3
18	1	103	30	38	83	43.3	0.183	33
19	1	115	70	30	96	34.6	0.529	3;

In [10]: data.tail()

Out[10]:		Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	ВМІ	DiabetesPedigreeFunction	Ą
	763	10	101	76	48	180	32.9	0.171	
	764	2	122	70	27	0	36.8	0.340	i
	765	5	121	72	23	112	26.2	0.245	
	766	1	126	60	0	0	30.1	0.349	4
	767	1	93	70	31	0	30.4	0.315	

In [11]: data.describe()

Out[11]:	Pregnancies		Glucose	BloodPressure	SkinThickness	Insulin	ВМІ	DiabetesPedig
	count	768.000000	768.000000	768.000000	768.000000	768.000000	768.000000	
	mean	3.845052	120.894531	69.105469	20.536458	79.799479	31.992578	
	std	3.369578	31.972618	19.355807	15.952218	115.244002	7.884160	
	min	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	
	25%	1.000000	99.000000	62.000000	0.000000	0.000000	27.300000	
	50%	3.000000	117.000000	72.000000	23.000000	30.500000	32.000000	

32.000000 127.250000

99.000000 846.000000

36.600000

67.100000

80.000000

122.000000

In [12]: data.shape

75%

max

(768, 9)Out[12]:

In [13]: data.size

6912 Out[13]:

In [14]: data.ndim

6.000000 140.250000

17.000000 199.000000

```
Out[14]: 2
In [15]:
          data.columns
         Index(['Pregnancies', 'Glucose', 'BloodPressure', 'SkinThickness', 'Insulin',
Out[15]:
                'BMI', 'DiabetesPedigreeFunction', 'Age', 'Outcome'],
               dtype='object')
In [16]:
          data.info()
         <class 'pandas.core.frame.DataFrame'>
         RangeIndex: 768 entries, 0 to 767
         Data columns (total 9 columns):
          #
            Column
                                      Non-Null Count Dtype
             ----
                                      -----
          0
             Pregnancies
                                      768 non-null int64
             Glucose
                                      768 non-null int64
          1
          2
             BloodPressure
                                     768 non-null int64
          3 SkinThickness
                                      768 non-null
                                                    int64
          4
            Insulin
                                      768 non-null
                                                    int64
                                      768 non-null
                                                    float64
          5
             BMI
          6
             DiabetesPedigreeFunction 768 non-null float64
          7
                                      768 non-null int64
             Outcome
                                      768 non-null
                                                    int64
          8
         dtypes: float64(2), int64(7)
         memory usage: 54.1 KB
 In [ ]:
```