

In [17]: `#EXP -2`

In [18]: `#Aim: To perform of getting basic statistical description of data`

In [3]: `# Name: Payal Devanand Manwar
Roll no.: 37
Sec:A
Subject:ET1
Date: 25/08/2025`

In [4]: `import pandas as pd`

In [5]: `import os`

In [6]: `os.getcwd()`

Out[6]: 'C:\\Users\\USER'

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	50
1	1	85	66	29	0	26.6	0.351	31
2	8	183	64	0	0	23.3	0.672	33
3	1	89	66	23	94	28.1	0.167	21
4	0	137	40	35	168	43.1	2.288	33
5	5	116	74	0	0	25.6	0.201	30
6	3	78	50	32	88	31.0	0.248	21
7	10	115	0	0	0	35.3	0.134	21
8	2	197	70	45	543	30.5	0.158	51
9	8	125	96	0	0	0.0	0.232	51
10	4	110	92	0	0	37.6	0.191	30
11	10	168	74	0	0	38.0	0.537	33
12	10	139	80	0	0	27.1	1.441	51
13	1	189	60	23	846	30.1	0.398	51
14	5	166	72	19	175	25.8	0.587	51

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age
15	7	100	0	0	0	30.0	0.484	31
16	0	118	84	47	230	45.8	0.551	31
17	7	107	74	0	0	29.6	0.254	31
18	1	103	30	38	83	43.3	0.183	31
19	1	115	70	30	96	34.6	0.529	31

In [10]: `data.tail()`

Out[10]:

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

In [11]: `data.describe()`

Out[11]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	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	
75%	6.000000	140.250000	80.000000	32.000000	127.250000	36.600000	
max	17.000000	199.000000	122.000000	99.000000	846.000000	67.100000	

In [12]: `data.shape`

Out[12]: (768, 9)

In [13]: `data.size`

Out[13]: 6912

In [14]: `data.ndim`

Out[14]: 2

In [15]: `data.columns`

Out[15]: Index(['Pregnancies', 'Glucose', 'BloodPressure', 'SkinThickness', 'Insulin',
 '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
1   Glucose               768 non-null   int64
2   BloodPressure         768 non-null   int64
3   SkinThickness         768 non-null   int64
4   Insulin               768 non-null   int64
5   BMI                  768 non-null   float64
6   DiabetesPedigreeFunction 768 non-null   float64
7   Age                  768 non-null   int64
8   Outcome              768 non-null   int64
dtypes: float64(2), int64(7)
memory usage: 54.1 KB
```

In []: