

In [17]: `#EXP -2`

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

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# 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)`

	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 37
3	1	89	66	23	94	28.1		0.167 21
4	0	137	40	35	168	43.1		2.288 31
5	5	116	74	0	0	25.6		0.201 30
6	3	78	50	32	88	31.0		0.248 26
7	10	115	0	0	0	35.3		0.134 29
8	2	197	70	45	543	30.5		0.158 53
9	8	125	96	0	0	0.0		0.232 54
10	4	110	92	0	0	37.6		0.191 31
11	10	168	74	0	0	38.0		0.537 34
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
16	0	118	84	47	230	45.8	0.551
17	7	107	74	0	0	29.6	0.254
18	1	103	30	38	83	43.3	0.183
19	1	115	70	30	96	34.6	0.529

In [10]:

`data.tail()`

Out[10]:

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

`data.describe()`

Out[11]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction
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	

`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 [ ]: