Statistical description on data

In [ ]:
```
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#Sec: C
#Subject:ET - 1
```

In [1]:
```
import pandas as pd
```

In [2]:
```
import os
```

In [3]:
```
os.getcwd()
```

Out[3]:
```
'C:\\Users\\dishi\\Downloads\\ET'
```

In [4]:
```
os.chdir("C:\\Users\\dishi\\Downloads\\ET")
```

In [5]:
```
df=pd.read_csv("diabetes.csv")
```

In [42]:
```
df.head()
```

Out[42]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	A
0	6	148	72	35	0	33.6	0.627	
1	1	85	66	29	0	26.6	0.351	
2	8	183	64	0	0	23.3	0.672	
3	1	89	66	23	94	28.1	0.167	
4	0	137	40	35	168	43.1	2.288	

In [44]:
```
df.tail()
```

Out[44]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction
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

In [46]:
```
# Range
range_value = df['Glucose'].max() - df['Glucose'].min()
print('Range:', range_value)
```

```
Range: 199
```

In [48]:
```
# Variance
variance_value = df['Glucose'].var()
```

```
print('Variance:', variance_value)
```

```
Variance: 1022.2483142519557
```

In [50]:
```
# Standard Deviation
std_dev_value = df['Glucose'].std()
print('Standard Deviation:', std_dev_value)
```

```
Standard Deviation: 31.97261819513622
```

In [52]:
```
# Mean Absolute Deviation
mad_value = (df['Glucose'] - df['Glucose'].mean()).abs().mean()
print('Mean Absolute Deviation:', mad_value)
```

```
Mean Absolute Deviation: 25.181793212890625
```

In [ ]:
```

```