```python
import pandas as pd
df=pd.read_csv("/content/archive (1).zip")
print(df)
```

```
     Pregnancies  Glucose  BloodPressure  SkinThickness  Insulin   BMI  \
0              6      148             72             35        0  33.6
1              1       85             66             29        0  26.6
2              8      183             64              0        0  23.3
3              1       89             66             23       94  28.1
4              0      137             40             35      168  43.1
..           ...      ...            ...            ...      ...   ...
763           10      101             76             48      180  32.9
764            2      122             70             27        0  36.8
765            5      121             72             23      112  26.2
766            1      126             60              0        0  30.1
767            1       93             70             31        0  30.4

     DiabetesPedigreeFunction  Age  Outcome
0                       0.627   50        1
1                       0.351   31        0
2                       0.672   32        1
3                       0.167   21        0
4                       2.288   33        1
..                        ...  ...      ...
763                     0.171   63        0
764                     0.340   27        0
765                     0.245   30        0
766                     0.349   47        1
767                     0.315   23        0

[768 rows x 9 columns]
```

```python
column_means = df.mean()
print("Mean of each column:")
print(column_means)
```

```
Mean of each column:
Pregnancies                   3.845052
Glucose                     120.894531
BloodPressure                69.105469
SkinThickness                20.536458
Insulin                      79.799479
BMI                          31.992578
DiabetesPedigreeFunction      0.471876
Age                          33.240885
Outcome                       0.348958
dtype: float64
```

```python
from sklearn.preprocessing import MinMaxScaler, StandardScaler
numerical_cols = df.columns[df.dtypes != 'object'].tolist()
numerical_cols.remove('Outcome')

min_max_scaler = MinMaxScaler()
df_minmax = df.copy()
df_minmax[numerical_cols] = min_max_scaler.fit_transform(df[numerical_cols])

print("Dataset after Min-Max Normalization:")
print(df_minmax.head())

standard_scaler = StandardScaler()
df_standardized = df.copy()
df_standardized[numerical_cols] = standard_scaler.fit_transform(df[numerical_cols])

print("\nDataset after Standardization:")
print(df_standardized.head())
```

```
Dataset after Min-Max Normalization:
   Pregnancies   Glucose  BloodPressure  SkinThickness   Insulin       BMI  \
0     0.352941  0.743719       0.590164       0.353535  0.000000  0.500745
1     0.058824  0.427136       0.540984       0.292929  0.000000  0.396423
2     0.470588  0.919598       0.524590       0.000000  0.000000  0.347243
3     0.058824  0.447236       0.540984       0.232323  0.111111  0.418778
4     0.000000  0.688442       0.327869       0.353535  0.198582  0.642325

   DiabetesPedigreeFunction       Age  Outcome
0                  0.234415  0.483333        1
1                  0.116567  0.166667        0
2                  0.253629  0.183333        1
3                  0.038002  0.000000        0
4                  0.943638  0.200000        1

Dataset after Standardization:
   Pregnancies   Glucose  BloodPressure  SkinThickness   Insulin       BMI  \
0     0.639947  0.848324       0.149641       0.907270 -0.692891  0.204013
```

```
   1  -0.844885 -1.123396      -0.160546      0.530902 -0.692891 -0.684422
   2   1.233880  1.943724      -0.263941     -1.288212 -0.692891 -1.103255
   3  -0.844885 -0.998208      -0.160546      0.154533  0.123302 -0.494043
   4  -1.141852  0.504055      -1.504687      0.907270  0.765836  1.409746

     DiabetesPedigreeFunction      Age  Outcome
   0                 0.468492  1.425995        1
   1                -0.365061 -0.190672        0
   2                 0.604397 -0.105584        1
   3                -0.920763 -1.041549        0
   4                 5.484909 -0.020496        1
```