```
from google.colab import files
uploaded = files.upload()
```

```
Choose Files No file chosen
Please rerun this cell to enable.
Saving data.csv to data.csv
```

Upload widget is only available when the cell has been executed in the current browser session.

```
import pandas as pd

df = pd.read_csv('data.csv')

print("Mean Marks:", df['Marks'].mean())
print("Median Marks:", df['Marks'].median())
print("Standard Deviation of Marks:", df['Marks'].std())
print("Min Marks:", df['Marks'].min())
print("Max Marks:", df['Marks'].max())
print("Sum of Marks:", df['Marks'].sum())
print("Count of records:", df['Marks'].count())
```

```
Mean Marks: 54.7
Median Marks: 50.0
Standard Deviation of Marks: 18.666964283341724
Min Marks: 31
Max Marks: 95
Sum of Marks: 547
Count of records: 10
```

```
print(df.describe())
```

```
              id      Marks
count  10.00000  10.000000
mean    5.50000  54.700000
std     3.02765  18.666964
min     1.00000  31.000000
25%     3.25000  45.000000
50%     5.50000  50.000000
75%     7.75000  63.750000
max    10.00000  95.000000
```

```
print(df['Marks'].describe())
print(df.groupby('gender')['Marks'].mean())
```

```
count    10.000000
mean     54.700000
std      18.666964
min      31.000000
25%      45.000000
50%      50.000000
75%      63.750000
max      95.000000
Name: Marks, dtype: float64
gender
Female    55.166667
Male      54.000000
Name: Marks, dtype: float64
```

```
from sklearn.preprocessing import LabelEncoder

le = LabelEncoder()
df['gender_encoded'] = le.fit_transform(df['gender'])
print(df[['gender', 'gender_encoded']])
```

```
   gender  gender_encoded
0  Female               0
1  Female               0
2    Male               1
3  Female               0
4  Female               0
5  Female               0
6    Male               1
7    Male               1
8    Male               1
9  Female               0
```

```
from sklearn.preprocessing import scale

df['Marks_scaled'] = scale(df['Marks'])
```

```
print(df[['Marks', 'Marks_scaled']])
```

```
   Marks  Marks_scaled
0     50     -0.265401
1     60      0.299282
2     65      0.581624
3     95      2.275674
4     31     -1.338300
5     45     -0.547743
6     45     -0.547743
7     70      0.863966
8     36     -1.055958
9     50     -0.265401
```

```
from sklearn.preprocessing import Binarizer

binarizer = Binarizer(threshold=50)
df['Marks_binarized'] = binarizer.fit_transform(df[['Marks']])
print(df[['Marks', 'Marks_binarized']])
```

```
   Marks  Marks_binarized
0     50                0
1     60                1
2     65                1
3     95                1
4     31                0
5     45                0
6     45                0
7     70                1
8     36                0
9     50                0
```