**Python code:**

"""Name: G.R.Nithishkumar Roll No.: 20ucs088

Ex No.: 1 Date: 25.01.2023

Program: Data Preprocessing in Machine Learning """

import pandas as pd

heading=["sno","name","rollno","marks"]

df=pd.read\_csv("info.csv",usecols=heading)

print("Data in the excel:\n",df)

print("\nDimension of the data:",df.shape)

print("\nFirst three records:\n",df.head(3))

print("\nLast three records:\n",df.tail(3))

mean1=df['marks'].mean()

sum1=df['marks'].sum()

max1=df['marks'].max()

min1=df['marks'].min()

count1=df['marks'].count()

median1=df['marks'].median()

std1=df['marks'].std()

var1=df['marks'].var()

print("\nMean of the marks: "+str(mean1));

print("\nSum of all marks: "+str(sum1));

print("\nMaximum mark: "+str(max1));

print("\nMinimum mark: "+str(min1));

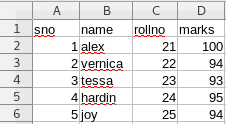
print("\nCount of marks: "+str(count1));

print("\nMedian of marks: "+str(median1));

print("\nStandard deviation: "+str(std1));

print("\nVariance: "+str(var1));

**CSV file:**



**Output:**

Data in the excel:

sno name rollno marks

0 1 alex 21 100

1 2 vernica 22 94

2 3 tessa 23 93

3 4 hardin 24 95

4 5 joy 25 94

Dimension of the data: (5, 4)

First three records:

sno name rollno marks

0 1 alex 21 100

1 2 vernica 22 94

2 3 tessa 23 93

Last three records:

sno name rollno marks

2 3 tessa 23 93

3 4 hardin 24 95

4 5 joy 25 94

Mean of the marks: 95.2

Sum of all marks: 476

Maximum mark: 100

Minimum mark: 93

Count of marks: 5

Median of marks: 94.0

Standard deviation: 2.7748873851023217

Variance: 7.700000000000001