Q 5.1: Creating a dataset

```
import pandas as pd
import numpy as np

data={
    'Name': ['Sajeeb','Alamin','Naima','Riaz','Badsa','Badsa Wife','Put
    'Age': [34,56,76,45,87,46,46,76,23,45],
    'Gender': ['M','M','F','M','M','M','F','F','M','M'],
    'Marks': [87,88,76,66,56,78,76,78,90,56]
}
df=pd.DataFrame(data)

x = df.to_csv('information.csv', index=False)
```

Q 5.1: Loading a dataset

```
data=pd.read_csv('information.csv')
print(data)
```

```
          Name  Age Gender  Marks
0        Sajeeb   34      M     87
1        Alamin   56      M     88
2         Naima   76      F     76
3          Riaz   45      M     66
4         Badsa   87      M     56
5    Badsa Wife   46      M     78
6          Puti   46      F     76
7        Montri   76      F     78
8         Gopal   23      M     90
9          Kobi   45      M     56
```

Q 5.2: Finding Mean, Median, Mode, Variance and Standard Deviation

```
mean = np.mean(data['Marks'])
median = np.median(data['Marks'])
mode_value = data['Marks'].mode()[0]
variance = np.var(data['Marks'])
variance = round(variance,2)
std_dev = np.std(data['Marks'])
std_dev= round(std_dev,2)
# # Print the results
```

```
# # Print the results
print('Mean:', mean)
print('Median:', median)
print('Mode:', mode_value)
print('Variance:', variance)
print('Standard Deviation:', std_dev)
```

```
Mean: 75.1
Median: 77.0
Mode: 56
Variance: 136.09
Standard Deviation: 11.67
```