In [1]:
```
#Exp_2
```

In [2]:
```
# Aim :Central Tendancy of Measures Mean,Median Mode
```

In [1]:
```
# Name:Dev Sanjay Vaidya
# Roll no.:69
# Sec : B
# Subject:ET1
# Date:31/07/25
```

In [10]:
```
age={21,23,21,22,24,25,21,23,22,21}
```

In [11]:
```
age
```

Out[11]:
```
{21, 22, 23, 24, 25}
```

In [12]:
```
import statistics
```

In [13]:
```
a=statistics.mean(age)
```

In [14]:
```
a
```

Out[14]:
```
23
```

In [15]:
```
b=statistics.median(age)
```

In [16]:
```
b
```

Out[16]:
```
23
```

In [17]:
```
c=statistics.mode(age)
```

In [24]:
```
c
```

Out[24]:
```
21
```

Performing Central Tendancy Of Measure Using Numpy

In [13]:
```
import numpy as np
x=np.array([1,2,3,4,5,6,2,3,5,6])
```

In [14]:
```
x
```

Out[14]:
```
array([1, 2, 3, 4, 5, 6, 2, 3, 5, 6])
```

In [15]:
```
print(np.mean(x))
```

```
3.7
```

In [16]:
```
print(np.median(x))
```

```
3.5
```

Performing Central Tendancy Of Measures Using Scipy

In [25]:
```
from scipy import stats
```

In [26]:
```
print(np.median(x))
```

```
3.0
```

In [28]:
```
print(np.std(x))
```

```
1.4937887931959075
```

In [29]:
```
from scipy import stats

data = [10, 12, 23, 23, 16, 23, 21, 16]

std_dev = stats.tstd(data)
print("Standard Deviation:", std_dev)
```

```
Standard Deviation: 5.237229365663817
```

In [ ]:
```

```