In [ ]:
```
statistics--->

statistics is the branch of science which helps to undersatnd the analyzing , su
making the decision.

types of statistics:

    1- descriptive statistics :
        - the data is available on physical form.
        - we have complete data available, its called population
        - we used that data for analyzing and summarazing based on numeric and c
        - we'll represent that data in the different different forms like - tabl


    2- Inferential statistics

    - we have a small data, its called sample.
    - To make a decision based on small data to make a decision that's called In
    eg - election poll, bloup group identify, to identify fishes from sea etc.
```

descriptive statistics

In [ ]:
```
1- measure of central tendency
2- measure of dispersion
```

1- measure of central tendency

- Mean
- Median
- Mode

In [2]:
```
# mean

# formula - add all no of items / count of total numbers

# formula -  2 + 3+ 4+ 5+ 6+ 7/ 6

values = [2,3,4,5,6,7]

mean = sum(values) / 6
mean
```

Out[2]: 4.5

In [4]:
```
(2 + 3+ 4+ 5+ 6+ 7)/ 6


#BODMAS RULE ----> Bracket, Orders,Divide,multiple,addition,substraction
```

Out[4]: 4.5

In [5]:
```
import numpy as np
```

In [7]:
```
print(np.mean(values))
```

```
4.5
```

Median

In [ ]:
```
# odd

1,2,3
N + 1 / 2

# even
1,2
N/2 + 1
```

In [8]:
```
lst = [1,2,3]

print(np.median(lst))
```

```
2.0
```

In [9]:
```
(3 + 1 ) /2
```

Out[9]: 2.0

In [12]:
```
# Mode
lst2 =[1,2,3,4,5,5,6,7,8]
import statistics as s
s.mode(lst2)
```

Out[12]: 5

In [ ]: