Introduction to statistics

1. Types of statistics

   Descriptive and Inferential

2. Analytics Methodology and how industry use statistics

   1. weather forecasting
   2. Giving Insurance
   3. Stock market
   4. Drug effectiveness before releasing to the public
   5. Diseased survival probablity
   6. Election winning and exit poll prediction
   7. Loan approval and fraud detection
   8. Netflix/Amazon recommendation
   9.New campaign effectiveness

3. Population and sample
4. Parameter and statistics(mean,Median,mode)
5.

In [2]:

```
# Mean (using stat)

import statistics as st
x=[10,20,30,40,35,40,40,50,50,50,50,45,50,60,70,80]
print (st.mean(x))


# using pandas
# import pandas as pd
# x_=pd.DataFrame(x)
#print(x_.mean())
```

```
45
```

In [4]:

```
#using pandas
import pandas as pd
x_=pd.DataFrame(x)
print(x_.mean())
```

```
0    45.0
dtype: float64
```

In [5]:

```
#Median
print(st.median(x))
```

```
47.5
```

In [6]:

```
#Mode
print(st.mode(x))
```

```
50
```

In [ ]:

In [ ]:

5. Uses of variable: Dependent and Independent variable

6. Types of Variable : Numerical and categorical variable

1.Numerical

a. continuous (Age, Marks)
b. Discrete (shoe size, Ranks)

2.Categorical(string)

a. Ordinal (Rating, Education level)
b. Nominal(Gender,Brands)

In [ ]: