In [ ]:
```
Variable or  data type

1- qualilative --  categorical

    1 - nominal

    2- ordinal -- Humam life cycle,


2- quantative -- Numerical

    1- discreate

    2- Continuous -- 12.5,167.5
```

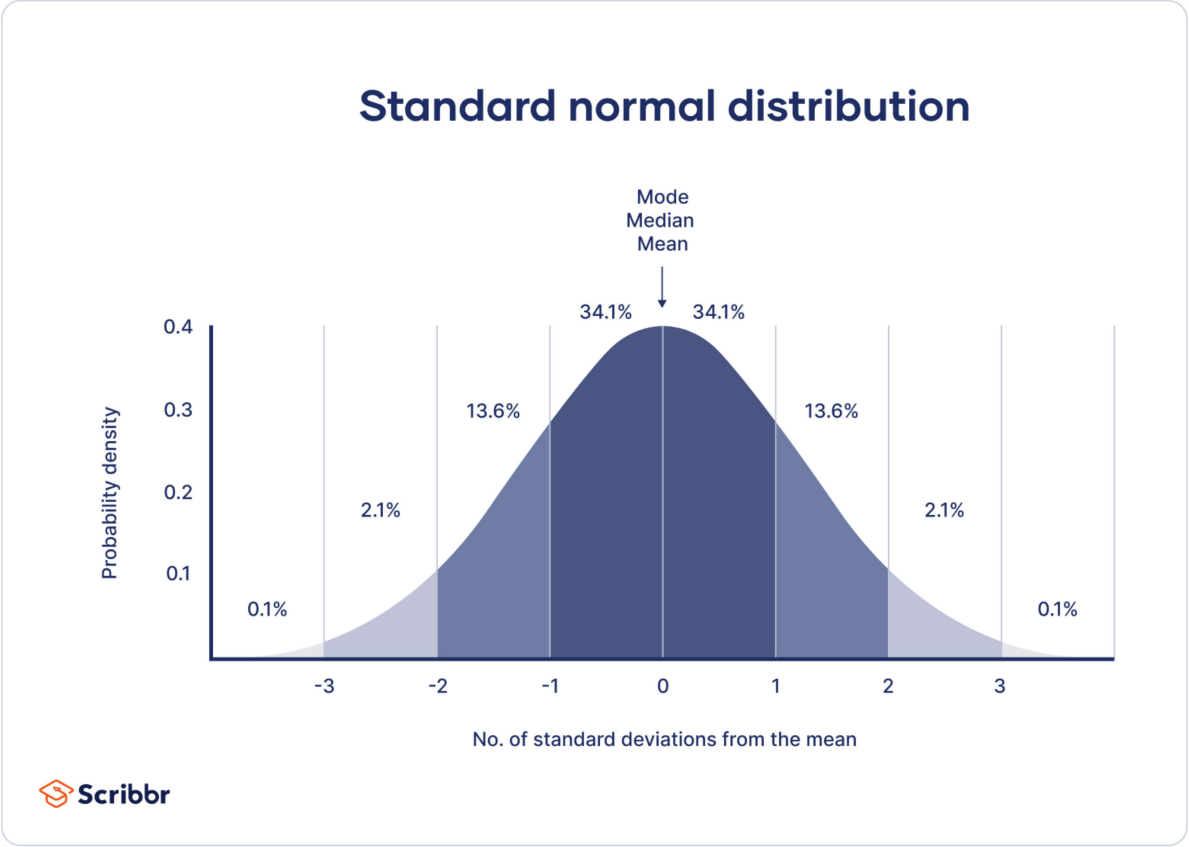
In [ ]:
```
Sample -- small data

Population --- full data


Sampling -- collection of sample results
```

In [ ]:
```
Range


highest value


lowest values


range = highest value - lowest value
```

In [1]:
```
lst = [37,45,66,77,12,34,56,79]
max_value = max(lst)
print(max_value)
min_value = min(lst)
print(min_value)

range =  max_value - min_value
range
```

```
79
12
```

Out[1]:
```
67
```




In [ ]:
```
Mean - x


Standard deviation


Empiricial Rule

Rule 1
pr[mu-sigma <=x  <=mu+sigma] ~ 68%

Rule2

pr[mu-2sigma <=x  <=mu+2sigma] ~ 95%


Rule3
pr[mu-3sigma <=x  <=mu+3sigma] ~ 99.7%
```