

Practical No. 04

Aim : To perform and analysis of Z Test parametric Test

In [3]:

```
#Name : Taufiq Rafik Nagori  
#Roll no. : 77 (BDA-B77)  
#Section : B  
#Subject : PE-II
```

In [4]:

```
import pandas as pd  
from scipy import stats  
from statsmodels.stats import weightstats as stests
```

In [5]:

```
data = [89,69,57,54,52,35,69,84,51,21,36,57,89,65,44,568,654,745,26,658,41,254,452,63,21
```

In [6]:

```
data
```

Out[6]:

```
[89,  
 69,  
 57,  
 54,  
 52,  
 35,  
 69,  
 84,  
 51,  
 21,  
 36,  
 57,  
 89,  
 65,  
 44,  
 568,  
 654,  
 745,  
 26,  
 658,  
 41,  
 254,  
 452,  
 63,  
 21,  
 25,  
 45,  
 23,  
 65,  
 111]
```

In [7]:

```
len (data)
```

```
Out[7]:  
30
```

```
In [8]:
```

```
z_test, p_val = stats.ztest(data, x2 = None, value = 160)  
print(p_val)
```

```
0.8821262545565735
```

```
In [14]:
```

```
# taking the threshold value as 0.05 or 5%  
if p_val < 0.05:  
    print("We can reject the null hypothesis")  
else:  
    print("We can accept the null hypothesis")
```

```
We can accept the null hypothesis
```

```
In [ ]:
```