Aim :- To solve the random variables using the Mannwhitneyu test.

In [10]:
```python
from scipy.stats import mannwhitneyu
```

In [11]:
```python
import numpy as np
```

In [12]:
```python
group_1 = [10,15,20,25,30,35,40,45,50,55,60,65]
group_2 = [1,3,5,7,9,11,13,15,17,19,21,23]
```

In [13]:
```python
statistic,p_value = mannwhitneyu(group_1,group_2)
```

In [14]:
```python
print("The Test Statistic value of the mannwhitneyu test is :",statistic)
```

The Test Statistic value of the mannwhitneyu test is : 13.5

In [15]:
```python
print("The p-Value is :",p_value)
```

The p-Value is : 0.00040499273874343856

In [16]:
```python
alpha = 0.025
```

In [17]:
```python
if(p_value < alpha):
    print("Reject the Null Hypothesis.There is significance diffrence between the groups.")
else:
    print("Failed to Reject the Null Hypothesis.There is NO significance diffrence between the groups.")
```

Reject the Null Hypothesis.There is significance diffrence between the groups.

Conclusion :-Hence the Study of the mannwhitneyu test is performed successfully.