

Python program to implement Mann-Whitney U Test

```
In [5]: #Name : Rajshri Kirandas Satpute
#Year : 3rd year
#Section : B
#Roll No : 55
#Date : 05/03/2024
```

```
In [6]: # Importing the required dataset
from scipy.stats import mannwhitneyu
```

```
In [7]: # Creating the dataset
data1 = [0.978, 2.792, 0.248, -0.820, -0.102, -1.203, 0.102, -1.392, -1.395, -1.928]
data2 = [1.283, -0.284, -0.821, -0.792, -0.793, -0.294, 0.600, 1.294, -1.183, -0.284]
```

```
In [8]: # Implementing the test
k_test, p_val = mannwhitneyu(data1, data2)
print("P-value is: ", p_val)
```

P-value is: 0.520366020896531

```
In [10]: # 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 [ ]:
```