To perform hypothesis testing using to perform Z-test

In [ ]:
```
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```

In [1]:
```
import numpy as np
a = np.random.randint(1,100,50)
print(a)
```

```
[36 89 60 27 37 79  2 68 30 99 87 81 99 79 82 31 25 52 13  7 97 64 46 83
 93 74 36 84 50 85 28 48 39  2 46 60 28 52 98 53 16 36 16 87 66 32 35 29
 26 13]
```

In [2]:
```
len(a)
```

Out[2]:
```
50
```

In [4]:
```
import pandas as pd
from scipy import stats
from statsmodels.stats import weightstats as stests
```

In [3]:
```
a = [61, 93, 84, 14, 61, 45, 59, 37, 21, 95, 60, 24, 52, 30, 82, 23, 26, 59, 60, 67, 29, 80, 15, 47,
 61 ,55 ,47 ,31 ,65 ,53 ,55 ,28 ,26  ,8 ,42 ,52, 46 ,48, 51 ,31 ,81 ,38 ,51 ,35 ,33 ,60 ,53 ,28,
 72 ,64]
```

In [7]:
```
z_test , p_val = stests.ztest(a , x2= None, value = 100)
print(p_val)
```

```
2.941508141307615e-68
```

In [9]:
```
if p_val < 0.05:
    print("We are rejecting null hypothesis")
else:
    print("We are accepting null hypothesis")
```

```
We are rejecting null hypothesis
```