In [ ]:
```
# Name:Khushi Chandrashekhar Satpute
#Aim: To perform and analysis of  T-test Parametric Test
#Roll No:43
#Sec:B
```

In [1]:
```
ages=[10,20,35,50,28,40,55,18,16,55,30,25,43,18,30,28,14,24,16,17,32,35,26,27,65,18,43,23,21,20,19,70]
```

In [3]:
```
len(ages)
```

Out[3]: 32

In [5]:
```
import numpy as np
ages_mean=np.mean(ages)
print(ages_mean)
```

```
30.34375
```

In [7]:
```
type(ages)
```

Out[7]: list

In [9]:
```
## Lets take sample
sample_size=10
age_sample=np.random.choice(ages,sample_size)
```

In [11]:
```
age_sample
```

Out[11]: array([50, 35, 43, 17, 21, 30, 35, 20, 21, 16])

In [13]:
```
age_sample
```

Out[13]: array([50, 35, 43, 17, 21, 30, 35, 20, 21, 16])

In [15]:
```
from scipy.stats import ttest_1samp
```

In [17]:
```
ttest,p_value=ttest_1samp(age_sample,30)
```

In [19]:
```
print(p_value)
```

```
0.7530551256563357
```

In [27]:
```
 if p_value < 0.05: # alpha value is 0.05 or 5%
     print(" we are rejecting null hypothesis")
else:
    print("we are accepting null hypothesis")
```

```
we are accepting null hypothesis
```

In [ ]:
```

```