

To find the hypothesis testing using to perform T-test

```
In [ ]: #Name: Shruti .P. Arsode  
#Roll no.: 03  
#Sec:'A'
```

```
In [4]: age = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,55,45]
```

```
In [5]: len(age)
```

```
Out[5]: 32
```

```
In [7]: import numpy as np  
age_mean=np.mean(age)  
print(age_mean)
```

```
17.65625
```

```
In [8]: sample_size = 10  
age_sample=np.random.choice(age,sample_size)
```

```
In [9]: print(age_sample)
```

```
[11 22 18 23 45  5 20 21  6  5]
```

```
In [11]: from scipy.stats import ttest_1samp
```

```
In [13]: ttest_,p_value=ttest_1samp(age_sample,30)
```

```
In [14]: print(p_value)
```

```
0.010042165164831255
```

```
In [15]: if p_value < 0.05:  
print("We are rejecting null hypothesis")  
else:  
print("We are accepting null hypothesis")
```

```
We are rejecting null hypothesis
```