

In [1]: `#Experiment No.7`

In [3]: `# Aim:To perform and analysis of T Test parametric Test.`

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`#Class: 3rd yr(B)`
`#Subject:ET-II`
`#Roll no.:69`

In [4]: `ages=[10,20,35,50,28,40,55,18,16,55,30,25,43,18,30,28,14,24,16,17,32,35,26,27,65,18,43,23,21,20,19,70,40,54]`

In [5]: `len(ages)`

Out[5]: 34

In [6]: `type(ages)`

Out[6]: list

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

31.323529411764707

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

In [9]: `age_sample`

Out[9]: array([16, 18, 10, 35, 16, 43, 16, 25, 50, 18])

In [10]: `from scipy.stats import ttest_1samp`

In [11]: `ttest,p_value=ttest_1samp(age_sample,30)`

In [12]: `print(p_value)`

0.2423008414129211

In [13]: `if p_value < 0.05:`
 `print("We are rejecting null hypothesis")`
`else:`
 `print("We are accepting null hypothesis")`

We are accepting null hypothesis

In []: