

ANAVO --> Analysis Of Variance

Two Types of Classification :-

- One way Classification---> In this Column wise Analysis
- Two way Classification---> In this Row and Column wise Analysis

Statement- Is there any significant difference in marks of ssc_p , hsc_p, mba_p ?

Null Hypothesis--> There is no significant difference in marks.

Alternate Hypothesis--> There is significant difference in marks.

```
#ONE Way Classification
import scipy.stats as stats
stats.f_oneway(dataset['ssc_p'],dataset['hsc_p'],dataset['mba_p'])
```

```
F_onewayResult(statistic=16.97502595052727, pvalue=6.548707180493164e-08)
```

Solution:-

- Rejected the Null Hypothesis $p < 0.05$.
- Then Accept the Alternate Hypothesis
- Here the difference between ssc_p ,hsc_p and mba_p marks is higher the p value.
- Then Null Hypothesis there is no significant difference between ssc_p,hsc_p,mba_p marks.
- Accept the Null Hypothesis and Reject the Alternate Hypothesis in this statement of one way Classification.