STEPS TO GET RESULTS FOR ANOVA TEST USING F TABLE

1. State the Null Hypothesis H0.
2. State the alternate Hypothesis Ha.
3. State significance level α.
4. Calculate the Grand Mean: nT= n1+ n2 + n3+ n4… + nk

k is total no. of groups and n is no. of data points

1. Calculate Group Means:

nj is no. of samples in group j

1. Calculate SSbetween: Sum of Squares of Deviations Between Groups:
2. Calculate SSwithin: Sum of Squares of Deviations Within Groups:
3. Calculate Degrees of Freedom for:
   1. Between Group: k - 1
   2. Within Group: n - k
4. Calculate
   1. Mean Sum of Squares of deviation Between:
   2. Mean Sum of Squares of deviation Within:
5. Calculate F statistics:
6. Get the p value from F table for degrees of freedom k-1 and n-k.
7. Compare p value with significance level to conclude.