

Assignment-4

DATA MINING AND DATA WAREHOUSING LAB (CSX-425)

NIT Jalandhar

Solve all the questions

- Q1: As a crop researcher, you want to test the effect of three different fertilizer mixtures on crop yield. You can use a one-way ANOVA to find out if there is a difference in crop yields between the three groups. Using the following data, perform a one-way analysis of variance using $\alpha=.05$.

| Group-1 | Group-2 | Group-3 |
|---------|---------|---------|
| 51 | 23 | 56 |
| 45 | 43 | 76 |
| 33 | 23 | 74 |
| 45 | 43 | 87 |
| 67 | 45 | 56 |
| 58 | 46 | 71 |

- Perform a one-way analysis of variance
 - Calculate test statistic
 - Interpreting the results
 - State Conclusion
 - Plot the graph for the same
- Q2: Repeat the question 1 and perform one-way analysis of variance using inbuilt dataset in Rstudio.