COMPUTATIONAL STATISTICS LAB PROGRAMS

1. Write a python program to find the best fit straight line of the form y=a+bx and draw the scatter plot.

2. Write a python program to fit a second degree parabola of the form $y=a+bx+cx^2$ and draw the scatter plot.

3. Write a python program to find Karl Pearson's correlation coefficient.

4. Write a python program to find the Spearman's correlation coefficient between x and y variables.

5. Write a python program to classify the data based on one way Anova.

6. Write a python program to classify the data based on two way Anova.

7. Write a python program to fit a multiple regression model for any given data.

8. Write a python program to fit a multivariate regression model for any given data.

9. Write a python program to classify the treatments based on MANOVA Test.

10. Write a python program to classify the given observations using Linear Discriminant Analysis.

11. Write a python program to find Principle components for the given variables.

12. Write a python program to group the given variables using Factor Analysis.