**Department of Computer Science and Engineering**

**Course: Design and Analysis of Algorithms**

**Shift-I**

**Assignment-Set-6**

**Max.Marks: 10**

**Last date of submission: 19-Oct-2019**

***(Students can also submit assignment in any other programming language)***

Q.1] Write python program for sum of subset problem. Generate three different test cases.

**Roll no 51**

Q.2] Consider String built in function like, strcmp, strlen. Write python program to demonstrate reduction principle of problem solving in string domain

**Roll no 53**

Q.3] Write program to demonstrate the application of Breadth first Search and Depth first Search in python language.

**Roll no 54**

Q.5] Implement python program for graph colouring. Use following graph to demonstrate test case



**Roll no 55**

Q.6] Write python program for string editing. Demonstrate the use of program for spell checking application

**Roll no 56**

Q.7] **Q.1] Read the distance data from Google Map related to 10 Cities. Create a distance matrix/data frame.**

Write a program in python to implement Kruskal Algorithm **Roll no 57**

**Q.8] A data of marks of 1000 students appeared in JEE exams is to be generated using random number generator in python. The data values must be in between 10-90.**

Write a program in python [recursive and iterative] to find Maximum and Minimum value from the list [use min\_max algorithm] How to use inbuilt stack in python. **[Roll no 58]**

**Q.9] A data of marks of 1000 students appeared in JEE exams is to be generated using random number generator in python. The data values must be in between 10-90. Sort the data using any sorting algorithm.**

Write a program in python the search an element. Also draw the search tree. **[Roll no 60]**