Project Description

**Project Objective**:- The project aims to find the minimum no. of rooms required to conduct a semester exam for various classes in a college and display the seating arrangement instantly. The students are required to be seated such that- 1.The capacity of exam hall is maintained. 2.Each exam hall contains students of two different classes in a 1:1 ratio nearly.

This project is basically made to depict the real life application of **Graph Coloring Algorithm( a greedy technique)**. As the algorithm considers that no two adjacent nodes should be assigned the same color and the entire graph is to be colored in minimum no of colors.

The similar concept is linked to classes of the college wherein each class is divided into segments according to the capacity such that no two segment of the same class should be assigned the same exam room. In this way, the minimum no. of rooms required is calculated along with distribution.

The record of students of each class is stored in a database which is accessed and used to achieve the objective. The flow chart of the project is depicted below:-