Course: **Algorithm and Data Structures**
Instructor: **Engr. Asif Suryani**
Class: **BSE-B3 (A&B)**

Assignment 5

There has been an airport in your city and that airport need attention in landing and departing of air planes. Airport authorities asked you to write a program for their air traffic. Your program should manage the air traffic in such a way that air traffic can be regulated without any confusion.

There has been single runway at the airport, both for landing and departing purposes. Airport has very vast space around where we can park numerous airplanes in the yard. Whenever an airplane request air traffic department for landing you should check runway is busy or idle and decides the appropriate action. Airplane takes 2 seconds to land and 2 seconds to take off.

Requirements:

- Your program should wait for the airplane to arrive as at start there should be five planes in the yard that can take off any time.
- Whenever a plane arrives or take off your program should wait for two seconds and then back to work again. Only one action can be performed at a time.
- Request for landing and taking off should be generated by computer not by user.
- Your program should keep a record of planes, i-e number of plane left and number of plane arrived.

Hint: Use random function.

Key to Success:

Assignment must be submitted to your Class CR in soft form till 18th December 04:30pm sharp. No queries will be entertained in any case after provided deadline. (No Email submission) Deadline will not be extended in any case.

Copying and cheating will lead towards straight ZERO and more.

Good Luck