**Activity 6 (Priority Queues)**

This is a group-based activity and should be submitted as a group work.

**Description:**

In an air-traffic control center, an agent assigns priority to flights. Higher priority is assigned to the connective flights with short-period connections. Non-connective flights have the lowest priority that means they are serviced last. Every flight has a flightNumber, an indication to whether or not it is connective, and a connection period in case it is a connective flight.

Using the provided data definition classes, including “Flight.java”, complete the data definition class PQEntry in “//TODO” section (i.e., calcKey() method), and design an implementation class “FlightImplementation.java” that a) reads flight information from user input using JOptionPane as long as there are more flights to be added, b) stores the flights in a priority queue, and c) displays the flights using JOptionPane in ordinance with the priority of flights. After running the code, flights should be printed out according to their priority, i.e., flight with minimum priority gets printed first compared to other flights.

Submit all your java files (the one you created, and those you are given). Your code should contain appropriate documentation.

Your java files must have the names, email, and Gnumber of the group members. Only one member requires submitting the files.