

## **Objectives:**

- 1. To understand basic problem solving techniques using Java Programming Language.
- 2. To declare Java primitive data types and arrays. In addition, to obtain input and display output.
- 3. To be able to use arithmetic and use different control structures (Decision making and Loops).

### **Specification**

Submission: through ITC.

What to submit: Your **OWN** well-structured and well-commented JAVA files (.java).

**Deadline:** 17/7/2021 by 8pm.

### **Important**

Academic honesty:

o This is an individual assignment. Individual assignments must be each student's own work.

Copying 1 line from a friend or the internet will be considered cheating.

 Cheating will result in an official university disciplinary review and the University regulations will be strictly enforced.

# **Airplane Reservation System**

Suppose you are required to develop an airplane reservation system ( طائرة ) for travelers. Please note the following specifications:

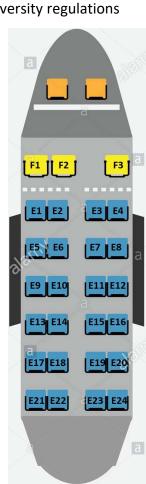
- You only have one small size airplane. Total number of seats is 27.
   The number of first class seats is 3 (F1 to F3), and the number of the economy seats is 24 (from E1 to E24). The layout of seats is as shown in the figure:
- When your program runs it should display the following menu:

Welcome to BZU Sky Reservation System,

#### choose:

- 1 To reserve one economy seat.
- 2 To reserve one first class seat.
- 3 To remove one reserved economy seat.
- 4 To remove one reserved first class seat.
- 5\_ To print reservation details.
- 6\_ To exit.

Enter your choice (1 - 6)?



- The above menu will keep on displaying until the user choose 6 to exit the program.
- When a user reserves a seat (by entering the seat number), the program should print that
  the reservation is successful (if the seat number is not reserved), and prints the number of
  the total reserved seats so far.
- When a user remove a seat (if the entered seat is reserved), the program should print that the remove reservation is successful and prints the number of the total reserved seats so far.
- If the economy seats are all reserved, your program should display a message saying that all economy seats are sold out. The same goes for the first class seats.

Good Luck!