

KING SAUD UNIVERSITY
COLLEGE OF COMPUTER AND INFORMATION SCIENCES
INFORMATION TECHNOLOGY DEPARTMENT

CSC 113: Java Programming 2

LAB 2
Array of Objects

2nd Semester 1437-1438

Write a program to manage room booking in a hotel. The program is composed of two classes: class **Room** and an application class **HotelApp**.

*Class **Room** has the following members:*

- Three appropriate attributes to store room number, guest name and room status (A for available rooms and N for non available rooms).
- A default constructor.
- toString() method that returns room's attributes.
- Any needed Getters and Setter.

*In class **HotelApp**:*

- Create and initialize an array of five rooms. Note that all rooms should be available when the program starts and room numbers are assigned in order starting from 1 until it reaches 5.
- Show a menu of the following options:
 - V: To View all rooms.
 - A: To Add guest to a room and print the room information. Print an appropriate message if the hotel is already full.
 - D: To Delete guest with a room number entered by user.
 - X. Exit
- Create the method **addGuest()** that accepts room array. The method returns the index of the added guest if it is successful or -1 otherwise. Note that the addition should be made in order i.e. the guest is added to the first available room.
- Create the method **deleteGuest()** that accepts room array and room number. The method should Print an appropriate message if the room is already available.