Day 7

Question 1

1. Create an abstract class Employee with the following:
    a. Instance variable: ArrayList<String> employees
    b. Methods:
        - search(String name): check if the name exists in the array list and print the appropriate message
    c. Abstract methods:
        - add(String name)
        - remove(String name)

2. Create a class UpperManager inheriting Employee class with the following:
    a. Implemented methods:
        - add(String name): check if name exists in array list and add the name in array list if the name is not present. Print the message after adding the name. If the name already exists then print the appropriate message.
        - remove(String name): If name exists then remove the name from array list and print the message after removing the name. If name does not exist, print the appropriate message.

3. Create a class LowerManager inheriting Employee class with the following:
    a. Implemented methods:
        - add(String name): Add the name in the array list and print the message.
        - remove(String name): Remove the name from array list and print the message.

4. Create a class Runner with the following:

   a. main method -
      - Using scanner, input 5 names and call add method
      - Input a value and call search method
      - Input a name and then call remove method
      - You have to call all the above methods for both the UpperManager and LowerManager class

Question 2

1. Create an interface Airline with the following:

   a. Methods:

      - int getTotalAvailableSeats()

      - void printName()

      - boolean book(String name, String passportNo)

2. Create two classes KathmanduAirline and PokharaAirline implementing Airline interface.

3. Create a class AirlineRunner that runs all methods of each class.