ASSIGNMENT NO.7

1. Declare a single-dimensional array of 5 integers inside the `main` method. Traverse the array to print the default values. Then accept records from the user and print the updated values of the array.

2. Declare a single-dimensional array of 5 integers inside the `main` method. Define a method named `acceptRecord` to get input from the terminal into the array and another method named `printRecord` to print the state of the array to the terminal.

3. Write a program to find the maximum and minimum values in a single-dimensional array of integers.

4. Write a program to remove duplicate elements from a single-dimensional array of integers.

5. Write a program to find the intersection of two single-dimensional arrays.

6. Write a program to find the missing number in an array of integers ranging from 1 to N.

7. Declare a single-dimensional array as a field inside a class and instantiate it inside the class constructor. Define methods named `acceptRecord` and `printRecord` within the class and test their functionality.

8. Modify the previous assignment to use getter and setter methods instead of `acceptRecord` and `printRecord`.

9. You need to implement a system to manage airplane seat assignments. The airplane has seats arranged in rows and columns. Implement functionalities to:

    - Initialize the seating arrangement with a given number of rows and columns.
    - Book a seat to mark it as occupied.
    - Cancel a booking to mark a seat as available.
    - Check seat availability to determine if a specific seat is available.
    - Display the current seating chart.