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Assignment-2

1. Move all zeroes to end of array.
   Input: 1 2 0 3 0 4 0 0 6
   Output: 1 2 3 4 6 0 0 0

→ Code:-

```java
import java.util.Scanner;
public class moveZeroAtEndOfArray {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the size of array: ");
        int size = sc.nextInt();

        int[] array = new int[size];
        System.out.print("Array Input: ");
        for(int i = 0; i<size; i++){
            array[i]=sc.nextInt();
        }

        int count = 0;
        for(int i = 0; i < size; i++) {
            if(array[i] != 0) {
                array[count++] = array[i];
            }
        }
        while(count < size) {
            array[count++] = 0;
        }

        System.out.print("Output: ");
        for(int i = 0; i < size; i++) {
            System.out.print(array[i] + " ");
        }
        sc.close();
    }
}
```

Output:-

```
24          }
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

PS E:\satish\lpu\6th sem\CSES002 External Expert Input
\Assignments\Assignment 2\" ; if ($?) { javac moveZero
Enter the size of array: 9
Array Input: 1 2 0 3 0 4 0 0 6
Output: 1 2 3 4 6 0 0 0 0
PS E:\satish\lpu\6th sem\CSES002 External Expert Input
```

2. Write a program to sort matrix.
Input: 1 5 6 4 3 8 9 7 2
Output: 1 2 3 4 5 6 7 8 9

→ Code:-

```java
import java.util.Arrays;
public class matrixSorting {
    public static void main(String[] args) {
        int[][] matrix = {{1, 5, 6},{4, 3, 8},{9, 7, 2}};

        int size = matrix.length;
        int[] temp = new int[size * size];
        int i=0,j=0,k = 0;

        System.out.println("Input: ");
        for (i = 0; i < size; i++) {
            for (j = 0; j < size; j++) {
                System.out.print(matrix[i][j] + " ");
            }
            System.out.println();
        }

        for (i = 0; i < size; i++) {
            for (j = 0; j < size; j++) {
                temp[k++] = matrix[i][j];
            }
        }
        Arrays.sort(temp);
        k = 0;
        for (i = 0; i < size; i++) {
            for (j = 0; j < size; j++) {
                matrix[i][j] = temp[k++];
            }
        }
        System.out.println("Output: ");
        for (i = 0; i < size; i++) {
            for (j = 0; j < size; j++) {
                System.out.print(matrix[i][j] + " ");
            }
            System.out.println();
        }
    }
}
```

Output:-

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS E:\satish\lpu\6th sem\CSES002 External Expert Input
\Assignments\Assignment 2\" ; if ($?) { javac matrixSo
Input:
1 5 6
4 3 8
9 7 2
Output:
1 2 3
4 5 6
7 8 9
PS E:\satish\lpu\6th sem\CSES002 External Expert Input
```

3. Write a program to remove occurrence of a particular character mentioned by user.
   Input: divija
   i
   output: dvja

→ Code:

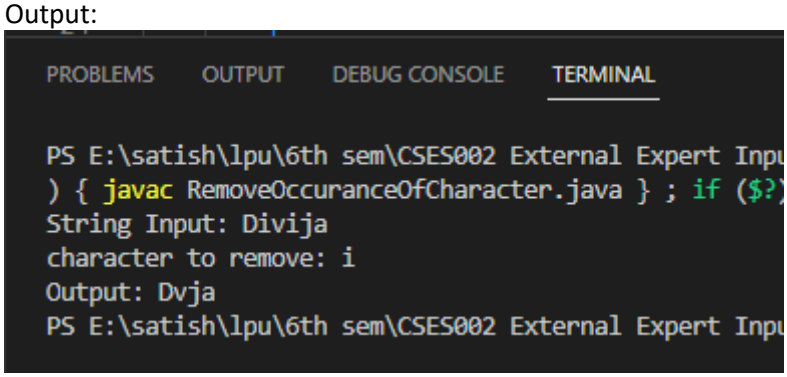
```java
import java.util.Scanner;
public class RemoveOccuranceOfCharacter{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("String Input: ");
        String str = sc.nextLine();

        int size = str.length();

        System.out.print("character to remove: ");
        char ch = sc.next().charAt(0);
        String finalString = "";
        for (int i = 0; i < size; i++) {
           if (str.charAt(i) != ch) {
              finalString += str.charAt(i);
           }
        }
        System.out.println("Output: " + finalString);
        sc.close();
    }
}
```

Output:



4. Write a program to find index of number which is larger than its neighbour values.
   Input: 10 5 30 11
   Output: 2

→Code:

```java
import java.util.Scanner;

public class IndexOflargestNeighbour{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the size of array: ");
        int size = sc.nextInt();

        int[] array = new int[size];
        System.out.print("Array Input: ");
        for(int i = 0; i<size; i++){
            array[i]=sc.nextInt();
        }

        int index = 0;
        for(int i=0; i<size-1; i++) {
            if(array[i] < array[i+1])
                index = i+1;
        }

        System.out.println("Index Output: "+ index);
        sc.close();
    }
}
```

Output:-

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL

PS E:\satish\lpu\6th sem\CSES002 External Expert Input Java\Assignme
) { javac IndexOflargestNeighbour.java } ; if ($?) { java IndexOfla
Enter the size of array: 4
Array Input: 10 5 30 11
Index Output: 2
PS E:\satish\lpu\6th sem\CSES002 External Expert Input Java\Assignme
```