NAME –KASYAP VARANASI

REGISTRATION NUMBER –20BCE7315

QUESTION-

Write a program to perform following operations of 1 dimensional integer array
1. Insert
2. Delete-it should delete a specified element
3. Find-search for a element
4. Display all array elements

CODE-

```
import java.util.Scanner;

public class arraylab{


   public static void main(String[] args) {
       int n, pos, x;
       Scanner s = new Scanner(System.in);

       System.out.print("Enter no. of elements in array:  ");

       n = s.nextInt();
```

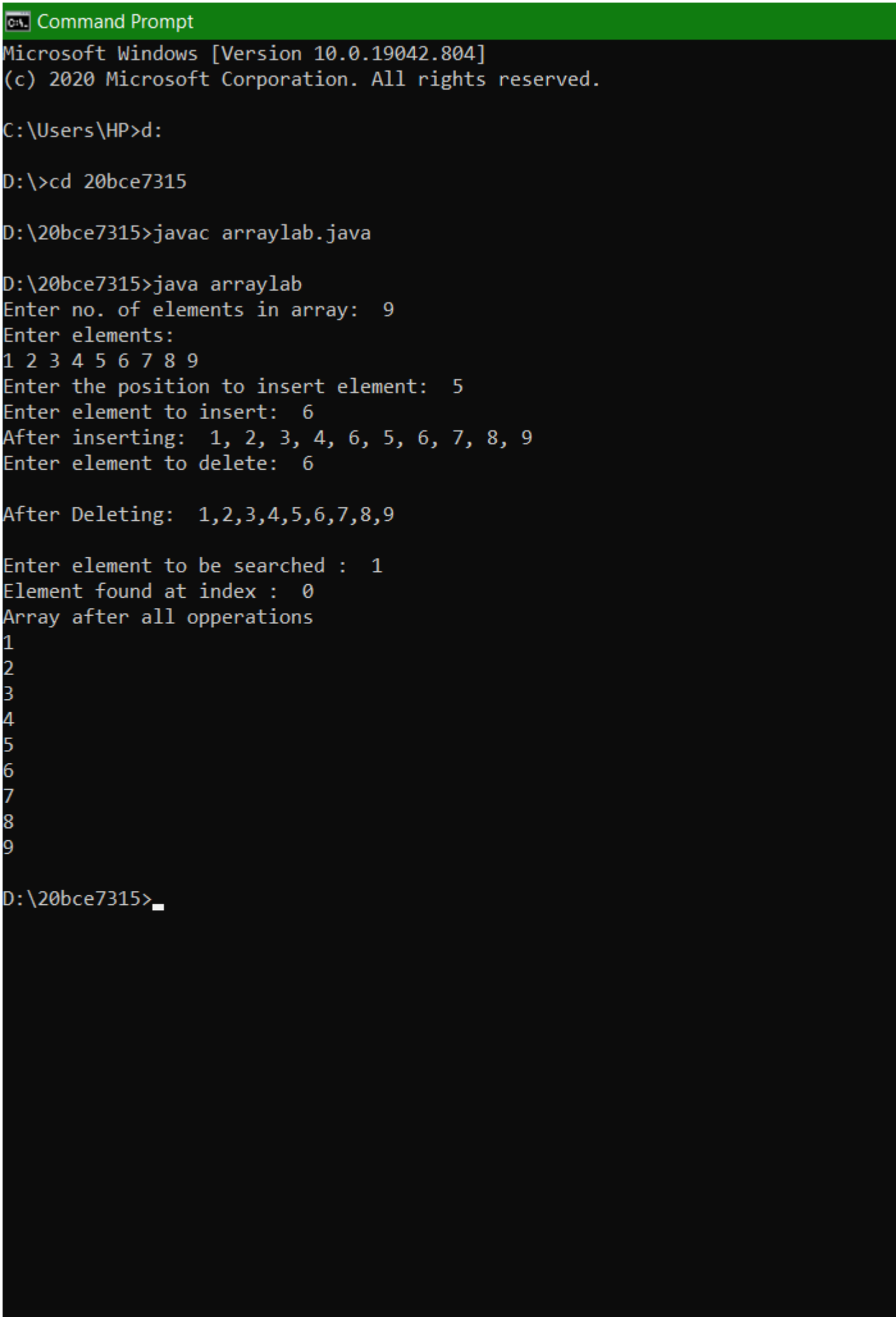
```
        int a[] = new int[n + 1];

        System.out.println("Enter elements:");
        for (int i = 0; i < n; i++) {
            a[i] = s.nextInt();
        }

        // insert

        System.out.print("Enter the position to insert
element:  ");
        pos = s.nextInt();

        System.out.print("Enter element to insert:  ");
        x = s.nextInt();

        for (int i = (n - 1); i >= (pos - 1); i--) {
            a[i + 1] = a[i];
        }
        a[pos - 1] = x;

        System.out.print("After inserting:  ");
        for (int i = 0; i < n; i++) {
```

```
            System.out.print(a[i] + ", ");
        }

        System.out.println(a[n]);

        // delete

        int flag = 1,delLoc =0;
        System.out.print("Enter element to delete:  ");
        int delElem = s.nextInt();

        for (int i = 0; i < n; i++) {
            if (a[i] == delElem) {
                flag = 1;
                delLoc = i;
                break;
            } else {
                flag = 0;
            }
        }

        if (flag == 1) {
            for (int i = delLoc; i < a.length - 1; i++) {
```

```
            a[i] = a[i + 1];
        }

        System.out.println();
        System.out.print("After Deleting:  ");
        for (int i = 0; i < n-1 ; i++) {
            System.out.print(a[i] + ",");
        }
        System.out.println(a[n]);
        System.out.println();
    } else {
        System.out.println("Element not found");
    }

    // search

    System.out.print("Enter element to be searched :
");
    int searchelem = s.nextInt();
    int searchFlag = 0;
    for (int i = 0; i < n; i++) {
        if (a[i] == searchelem) {
```

```
                System.out.println("Element found at index :
"+i);
                searchFlag = 1;
            }
        }

        if (searchFlag == 0){
            System.out.println("Element not found");
        }

        //Displaying array
        System.out.println("Array after all opperations");
        for (int i = 0; i < n; i++) {
            System.out.println(a[i]);
        }
    }
}
```

OUTPUT-


Command Prompt
Microsoft Windows [Version 10.0.19042.804]
(c) 2020 Microsoft Corporation. All rights reserved.
C:\Users\HP>d:
D:\>cd 20bce7315
D:\20bce7315>javac arraylab.java
D:\20bce7315>java arraylab
Enter no. of elements in array: 9
Enter elements:
1 2 3 4 5 6 7 8 9
Enter the position to insert element: 5
Enter element to insert: 6
After inserting: 1, 2, 3, 4, 6, 5, 6, 7, 8, 9
Enter element to delete: 6
After Deleting: 1,2,3,4,5,6,7,8,9
Enter element to be searched : 1
Element found at index : 0
Array after all opperations
1
2
3
4
5
6
7
8
9
D:\20bce7315>