Assignment No:-15

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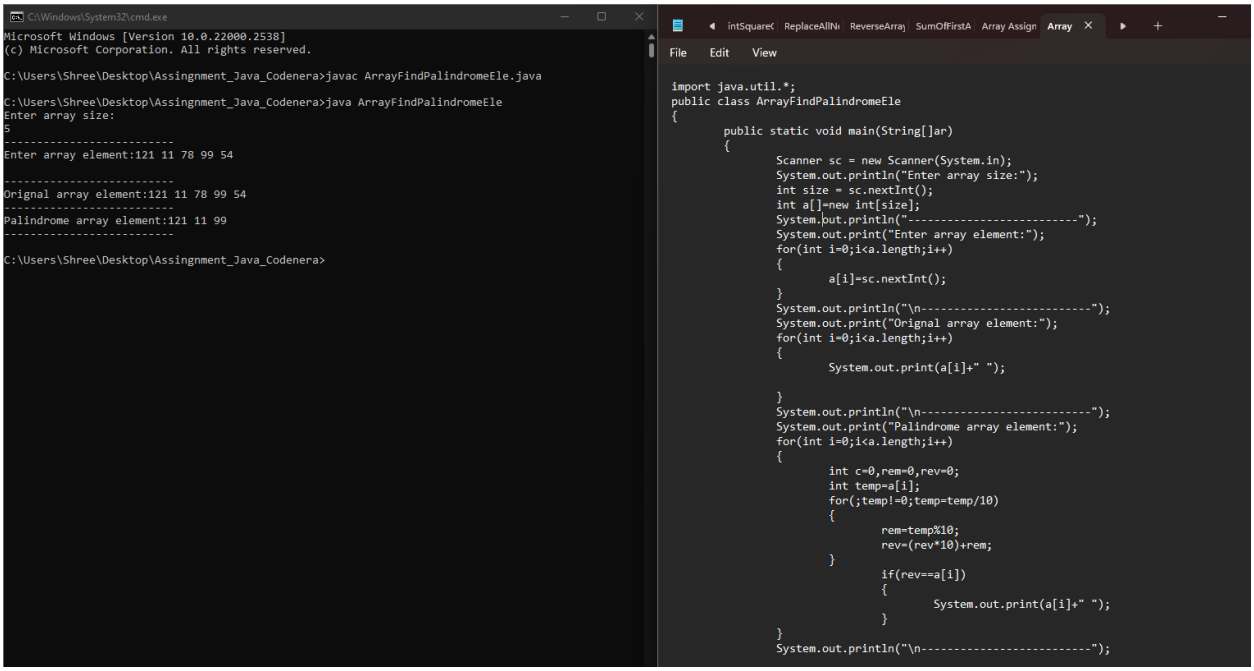
Batch: - Delta - DCA (Java) 2024 Date:-22/5/2024

1. Write a java program to find all the palindrome numbers from the array.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.2538]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>javac ArrayFindPalindromeEle.java

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java ArrayFindPalindromeEle
Enter array size:
5
-------------------------
Enter array element:121 11 78 99 54

-------------------------
Orignal array element:121 11 78 99 54
-------------------------
Palindrome array element:121 11 99
-------------------------

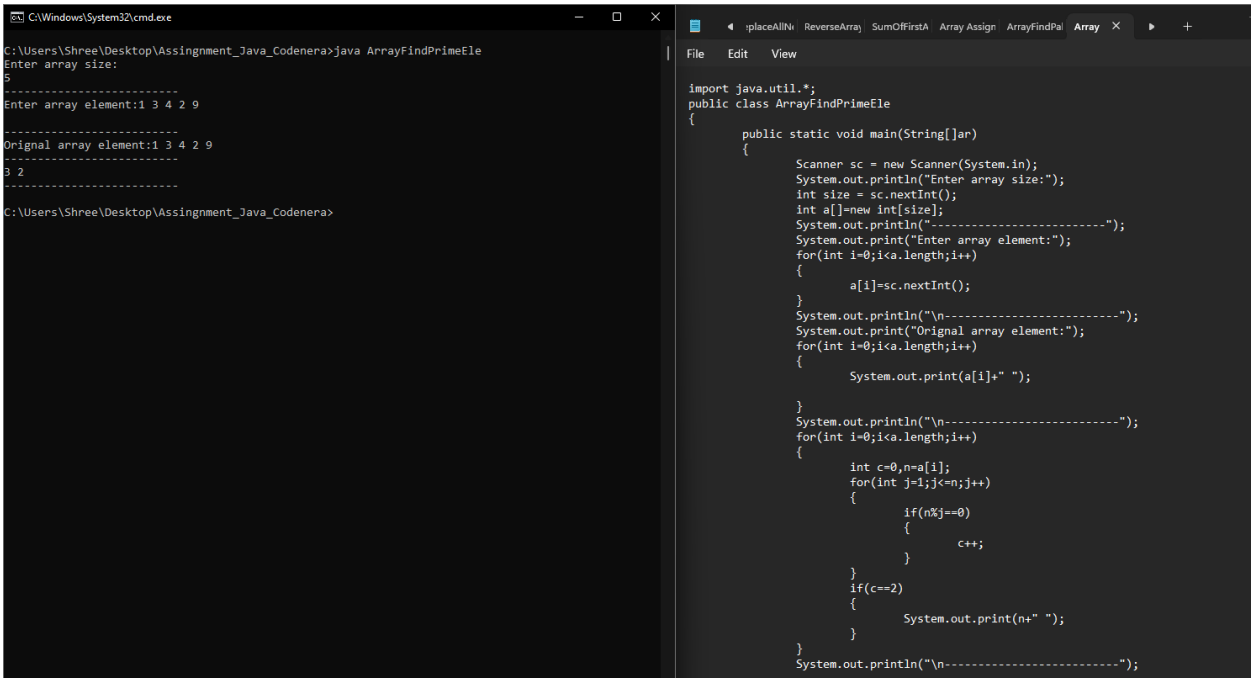
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
intSquare( ReplaceAllN ReverseArra SumOfFirstA Array Assign Array
File Edit View

import java.util.*;
public class ArrayFindPalindromeEle
{
	public static void main(String[]ar)
	{
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter array size:");
		int size = sc.nextInt();
		int a[]=new int[size];
		System.out.println("-------------------------");
		System.out.print("Enter array element:");
		for(int i=0;i<a.length;i++)
		{
			a[i]=sc.nextInt();
		}
		System.out.println("\n-------------------------");
		System.out.print("Orignal array element:");
		for(int i=0;i<a.length;i++)
		{
			System.out.print(a[i]+" ");

		}
		System.out.println("\n-------------------------");
		System.out.print("Palindrome array element:");
		for(int i=0;i<a.length;i++)
		{
			int c=0,rem=0,rev=0;
			int temp=a[i];
			for(;temp!=0;temp=temp/10)
			{
				rem=temp%10;
				rev=(rev*10)+rem;
			}
				if(rev==a[i])
				{
					System.out.print(a[i]+" ");
				}
		}
		System.out.println("\n-------------------------");
```

2. Write a java program to find all the prime numbers from the array.



```
C:\Windows\System32\cmd.exe

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java ArrayFindPrimeEle
Enter array size:
5
-------------------------
Enter array element:1 3 4 2 9

-------------------------
Orignal array element:1 3 4 2 9
-------------------------
3 2
-------------------------

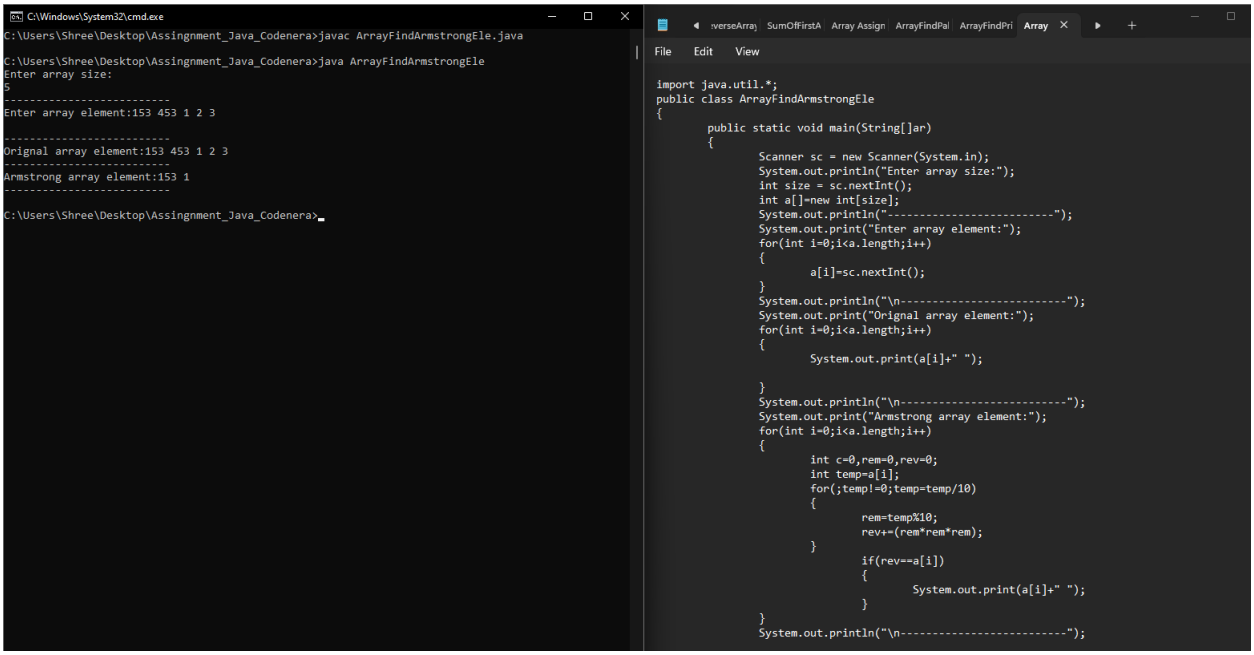
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
File  Edit  View

import java.util.*;
public class ArrayFindPrimeEle
{
        public static void main(String[]ar)
        {
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter array size:");
                int size = sc.nextInt();
                int a[]=new int[size];
                System.out.println("-------------------------");
                System.out.print("Enter array element:");
                for(int i=0;i<a.length;i++)
                {
                        a[i]=sc.nextInt();
                }
                System.out.println("\n-------------------------");
                System.out.print("Orignal array element:");
                for(int i=0;i<a.length;i++)
                {
                        System.out.print(a[i]+" ");

                }
                System.out.println("\n-------------------------");
                for(int i=0;i<a.length;i++)
                {
                        int c=0,n=a[i];
                        for(int j=1;j<=n;j++)
                        {
                                if(n%j==0)
                                {
                                        c++;
                                }
                        }
                        if(c==2)
                        {
                                System.out.print(n+" ");
                        }
                }
                System.out.println("\n-------------------------");
```

3. Write a java program to find all the Armstrong numbers from the array.



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C:\Windows\System32\cmd.exe
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>javac ArrayFindArmstrongEle.java

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java ArrayFindArmstrongEle
Enter array size:
5
--------------------------
Enter array element:153 453 1 2 3

--------------------------
Orignal array element:153 453 1 2 3
--------------------------
Armstrong array element:153 1
--------------------------

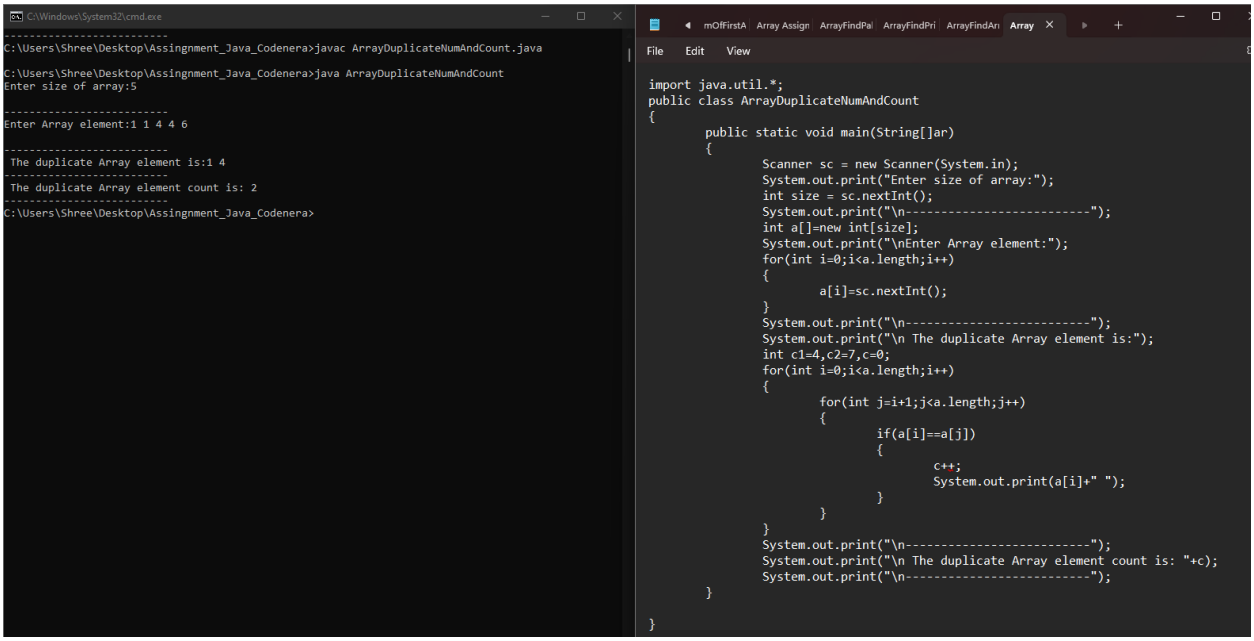
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
File  Edit  View

import java.util.*;
public class ArrayFindArmstrongEle
{
	public static void main(String[]ar)
	{
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter array size:");
		int size = sc.nextInt();
		int a[]=new int[size];
		System.out.println("--------------------------");
		System.out.print("Enter array element:");
		for(int i=0;i<a.length;i++)
		{
			a[i]=sc.nextInt();
		}
		System.out.println("\n--------------------------");
		System.out.print("Orignal array element:");
		for(int i=0;i<a.length;i++)
		{
			System.out.print(a[i]+" ");

		}
		System.out.println("\n--------------------------");
		System.out.print("Armstrong array element:");
		for(int i=0;i<a.length;i++)
		{
			int c=0,rem=0,rev=0;
			int temp=a[i];
			for(;temp!=0;temp=temp/10)
			{
				rem=temp%10;
				rev+=(rem*rem*rem);
			}
				if(rev==a[i])
				{
					System.out.print(a[i]+" ");
				}
		}
		System.out.println("\n--------------------------");
```

4. Write a java program to find all the duplicate numbers from the array.



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C:\Users\Shree\Desktop\Assignment_Java_Codenera>javac ArrayDuplicateNumAndCount.java

C:\Users\Shree\Desktop\Assignment_Java_Codenera>java ArrayDuplicateNumAndCount
Enter size of array:5

--------------------------
Enter Array element:1 1 4 4 6

--------------------------
 The duplicate Array element is:1 4
--------------------------
 The duplicate Array element count is: 2
--------------------------
C:\Users\Shree\Desktop\Assignment_Java_Codenera>
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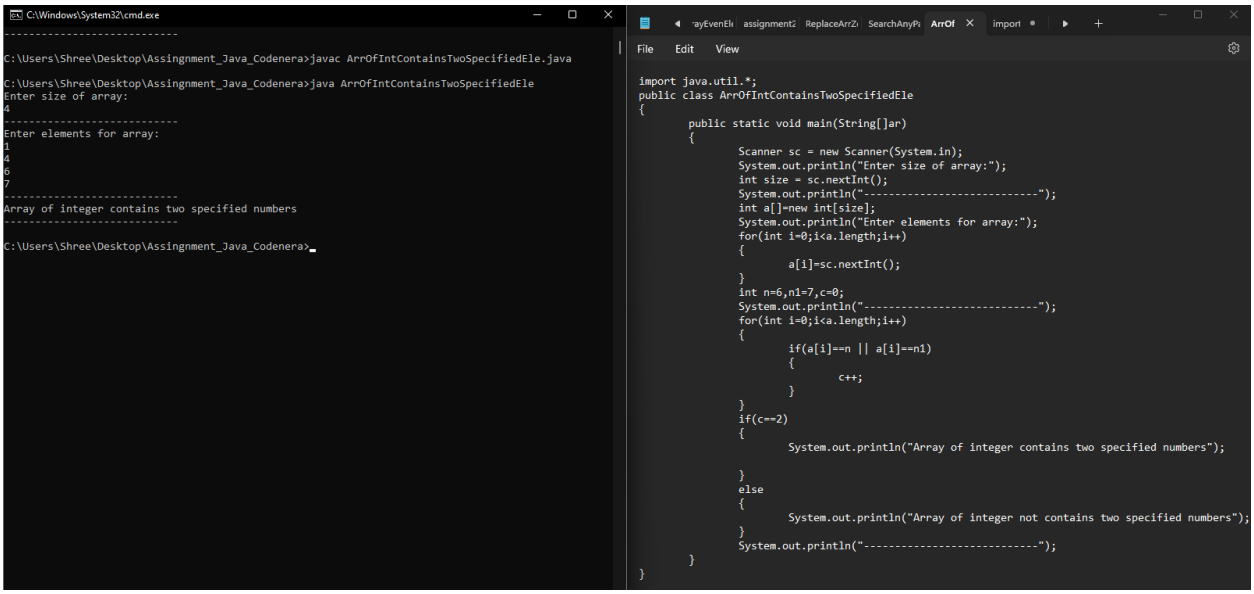
```
File  Edit  View

import java.util.*;
public class ArrayDuplicateNumAndCount
{
        public static void main(String[]ar)
        {
                Scanner sc = new Scanner(System.in);
                System.out.print("Enter size of array:");
                int size = sc.nextInt();
                System.out.print("\n--------------------------");
                int a[]=new int[size];
                System.out.print("\nEnter Array element:");
                for(int i=0;i<a.length;i++)
                {
                        a[i]=sc.nextInt();
                }
                System.out.print("\n--------------------------");
                System.out.print("\n The duplicate Array element is:");
                int c1=4,c2=7,c=0;
                for(int i=0;i<a.length;i++)
                {
                        for(int j=i+1;j<a.length;j++)
                        {
                                if(a[i]==a[j])
                                {
                                        c++;
                                        System.out.print(a[i]+" ");
                                }
                        }
                }
                System.out.print("\n--------------------------");
                System.out.print("\n The duplicate Array element count is: "+c);
                System.out.print("\n--------------------------");
        }

}
```

5. Write a program to check if an array of integers contains two specified elements.



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C:\Windows\System32\cmd.exe
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C:\Users\Shree\Desktop\Assingnment_Java_Codenera>javac ArrOfIntContainsTwoSpecifiedEle.java

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java ArrOfIntContainsTwoSpecifiedEle
Enter size of array:
4
----------------------------
Enter elements for array:
1
4
6
7
----------------------------
Array of integer contains two specified numbers
----------------------------

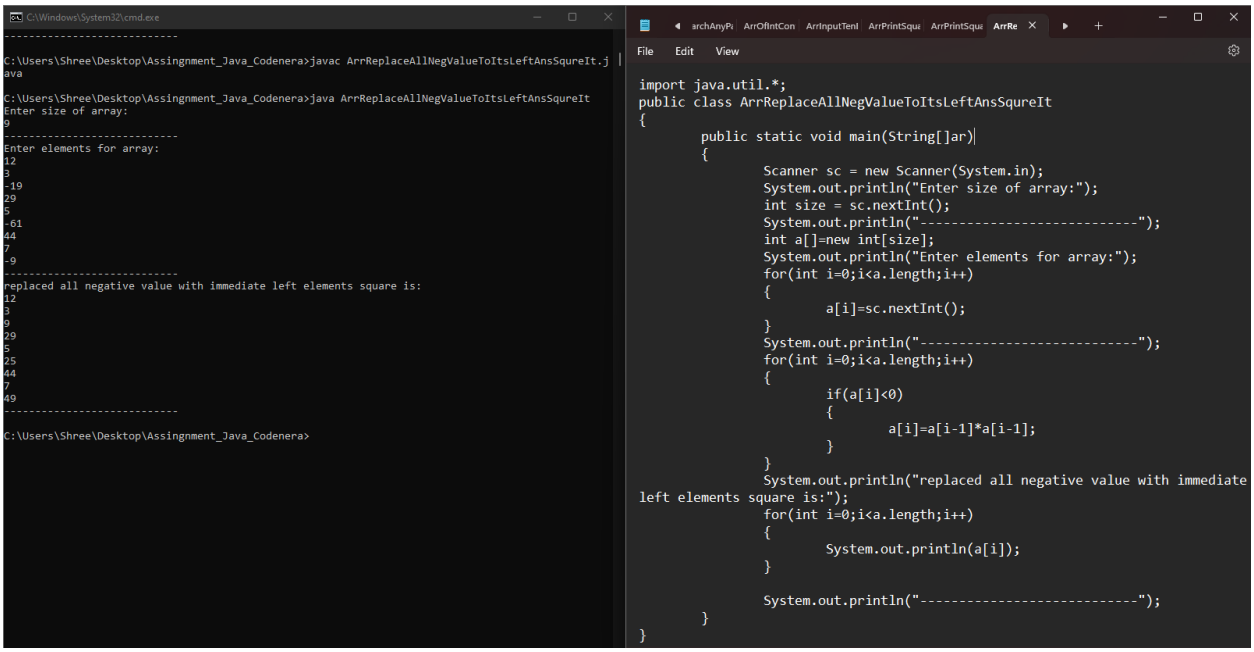
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
File  Edit  View

import java.util.*;
public class ArrOfIntContainsTwoSpecifiedEle
{
        public static void main(String[]ar)
        {
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter size of array:");
                int size = sc.nextInt();
                System.out.println("----------------------------");
                int a[]=new int[size];
                System.out.println("Enter elements for array:");
                for(int i=0;i<a.length;i++)
                {
                        a[i]=sc.nextInt();
                }
                int n=6,n1=7,c=0;
                System.out.println("----------------------------");
                for(int i=0;i<a.length;i++)
                {
                        if(a[i]==n || a[i]==n1)
                        {
                                c++;
                        }
                }
                if(c==2)
                {
                        System.out.println("Array of integer contains two specified numbers");

                }
                else
                {
                        System.out.println("Array of integer not contains two specified numbers");
                }
                System.out.println("----------------------------");
        }
}
```

6. Write a program replace all negative value with its immediate left elements square. Means arr[] = [12, 3, -19, 29, 5, -61, 44, 7, -9] Output array will be [12, 3, 9, 29, 5, 25, 44, 7, 49].



```
C:\Windows\System32\cmd.exe
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C:\Users\Shree\Desktop\Assingnment_Java_Codenera>javac ArrReplaceAllNegValueToItsLeftAnsSqureIt.j
ava

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java ArrReplaceAllNegValueToItsLeftAnsSqureIt
Enter size of array:
9
----------------------------
Enter elements for array:
12
3
-19
29
5
-61
44
7
-9
----------------------------
replaced all negative value with immediate left elements square is:
12
3
9
29
5
25
44
7
49
----------------------------

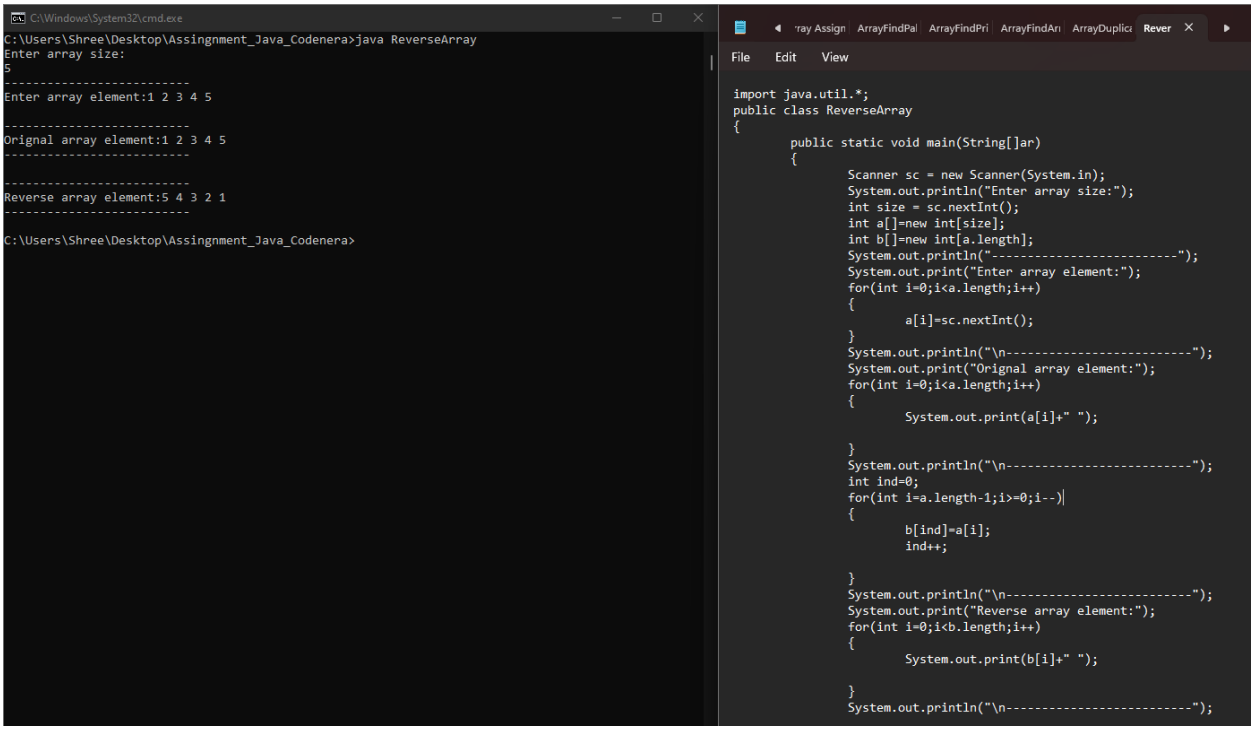
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
File  Edit  View

import java.util.*;
public class ArrReplaceAllNegValueToItsLeftAnsSqureIt
{
        public static void main(String[]ar)
        {
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter size of array:");
                int size = sc.nextInt();
                System.out.println("----------------------------");
                int a[]=new int[size];
                System.out.println("Enter elements for array:");
                for(int i=0;i<a.length;i++)
                {
                        a[i]=sc.nextInt();
                }
                System.out.println("----------------------------");
                for(int i=0;i<a.length;i++)
                {
                        if(a[i]<0)
                        {
                                a[i]=a[i-1]*a[i-1];
                        }
                }
                System.out.println("replaced all negative value with immediate
left elements square is:");
                for(int i=0;i<a.length;i++)
                {
                        System.out.println(a[i]);
                }

                System.out.println("----------------------------");
        }
}
```

7. Write a program enter an array and print it in reverse order.



```
C:\Windows\System32\cmd.exe
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java ReverseArray
Enter array size:
5
--------------------------
Enter array element:1 2 3 4 5

--------------------------
Orignal array element:1 2 3 4 5
--------------------------

--------------------------
Reverse array element:5 4 3 2 1
--------------------------

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

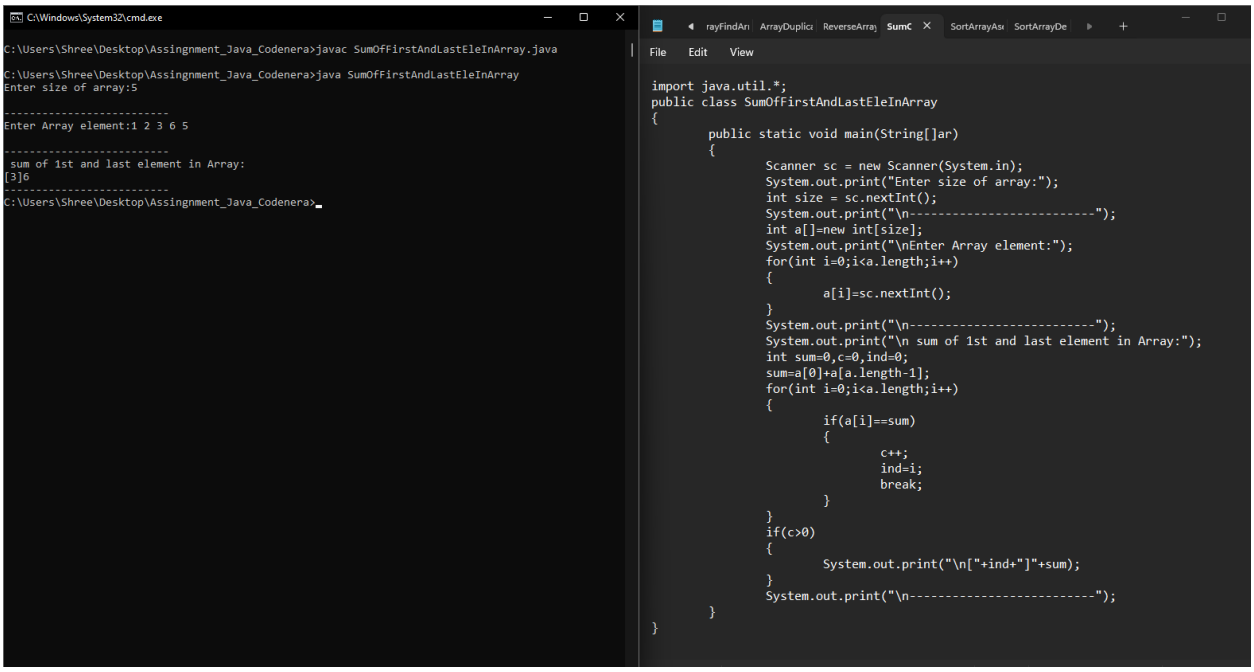
```
import java.util.*;
public class ReverseArray
{
	public static void main(String[]ar)
	{
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter array size:");
		int size = sc.nextInt();
		int a[]=new int[size];
		int b[]=new int[a.length];
		System.out.println("--------------------------");
		System.out.print("Enter array element:");
		for(int i=0;i<a.length;i++)
		{
			a[i]=sc.nextInt();
		}
		System.out.println("\n--------------------------");
		System.out.print("Orignal array element:");
		for(int i=0;i<a.length;i++)
		{
			System.out.print(a[i]+" ");

		}
		System.out.println("\n--------------------------");
		int ind=0;
		for(int i=a.length-1;i>=0;i--)
		{
			b[ind]=a[i];
			ind++;

		}
		System.out.println("\n--------------------------");
		System.out.print("Reverse array element:");
		for(int i=0;i<b.length;i++)
		{
			System.out.print(b[i]+" ");

		}
		System.out.println("\n--------------------------");
```

8. Write a program enter an array and find the no in array which is equal to the sum of 1st and last element.



```
C:\Windows\System32\cmd.exe

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>javac SumOfFirstAndLastEleInArray.java

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java SumOfFirstAndLastEleInArray
Enter size of array:5

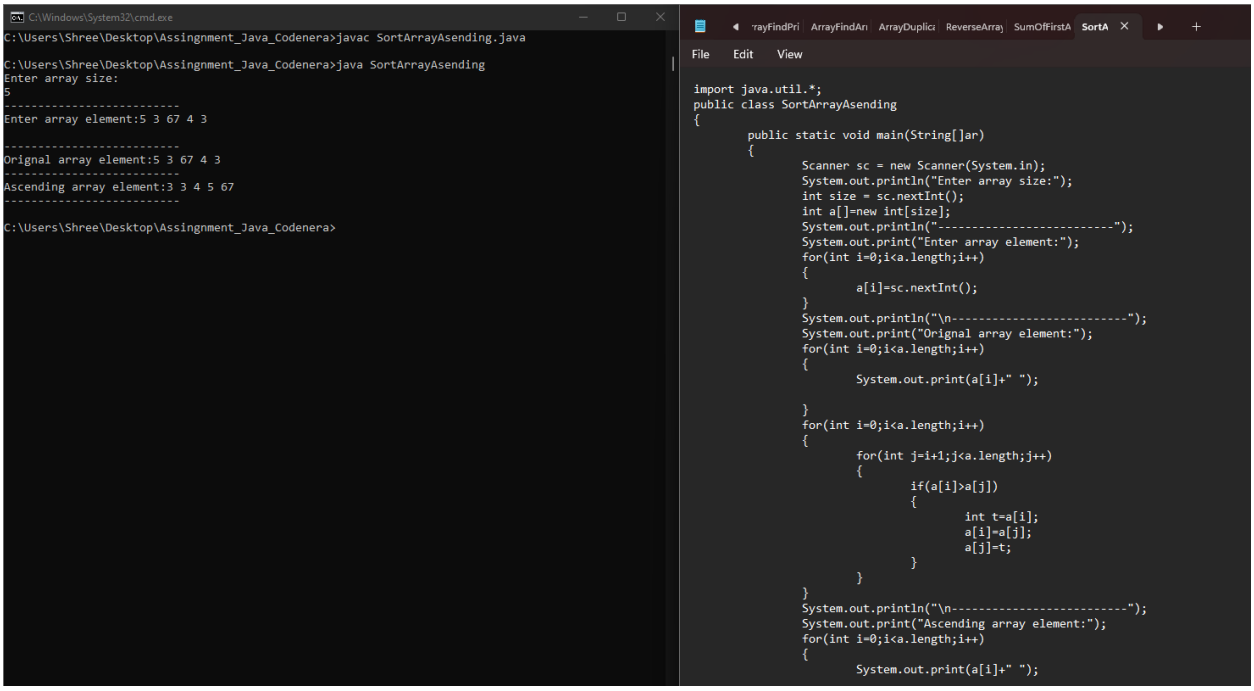
-------------------------
Enter Array element:1 2 3 6 5

-------------------------
 sum of 1st and last element in Array:
[3]6
-------------------------
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
File  Edit  View

import java.util.*;
public class SumOfFirstAndLastEleInArray
{
        public static void main(String[]ar)
        {
                Scanner sc = new Scanner(System.in);
                System.out.print("Enter size of array:");
                int size = sc.nextInt();
                System.out.print("\n-------------------------");
                int a[]=new int[size];
                System.out.print("\nEnter Array element:");
                for(int i=0;i<a.length;i++)
                {
                        a[i]=sc.nextInt();
                }
                System.out.print("\n-------------------------");
                System.out.print("\n sum of 1st and last element in Array:");
                int sum=0,c=0,ind=0;
                sum=a[0]+a[a.length-1];
                for(int i=0;i<a.length;i++)
                {
                        if(a[i]==sum)
                        {
                                c++;
                                ind=i;
                                break;
                        }
                }
                if(c>0)
                {
                        System.out.print("\n["+ind+"]"+sum);
                }
                System.out.print("\n-------------------------");
        }
}
```

9. Write a program enter an array and sort that in ascending order.



```
C:\Windows\System32\cmd.exe
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>javac SortArrayAsending.java

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java SortArrayAsending
Enter array size:
5
-------------------------
Enter array element:5 3 67 4 3

-------------------------
Orignal array element:5 3 67 4 3
-------------------------
Ascending array element:3 3 4 5 67
-------------------------

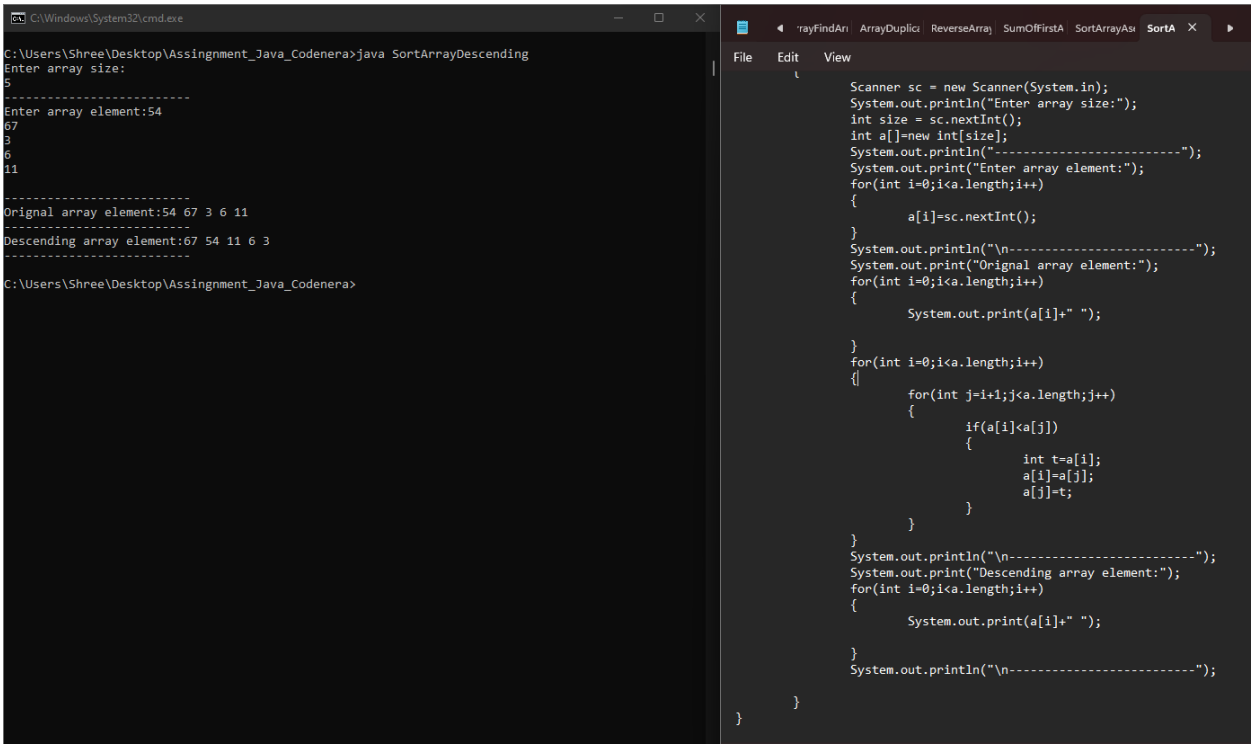
C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

```
rayFindPri  ArrayFindAr  ArrayDuplic  ReverseArra  SumOfFirstA  SortA
File  Edit  View

import java.util.*;
public class SortArrayAsending
{
        public static void main(String[]ar)
        {
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter array size:");
                int size = sc.nextInt();
                int a[]=new int[size];
                System.out.println("-------------------------");
                System.out.print("Enter array element:");
                for(int i=0;i<a.length;i++)
                {
                        a[i]=sc.nextInt();
                }
                System.out.println("\n-------------------------");
                System.out.print("Orignal array element:");
                for(int i=0;i<a.length;i++)
                {
                        System.out.print(a[i]+" ");

                }
                for(int i=0;i<a.length;i++)
                {
                        for(int j=i+1;j<a.length;j++)
                        {
                                if(a[i]>a[j])
                                {
                                        int t=a[i];
                                        a[i]=a[j];
                                        a[j]=t;
                                }
                        }
                }
                System.out.println("\n-------------------------");
                System.out.print("Ascending array element:");
                for(int i=0;i<a.length;i++)
                {
                        System.out.print(a[i]+" ");
```

10. Write a program enter an array and sort that in descending order.



```
C:\Windows\System32\cmd.exe

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>java SortArrayDescending
Enter array size:
5
-------------------------
Enter array element:54
67
3
6
11

-------------------------
Orignal array element:54 67 3 6 11
-------------------------
Descending array element:67 54 11 6 3
-------------------------

C:\Users\Shree\Desktop\Assingnment_Java_Codenera>
```

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        Scanner sc = new Scanner(System.in);
        System.out.println("Enter array size:");
        int size = sc.nextInt();
        int a[]=new int[size];
        System.out.println("-------------------------");
        System.out.print("Enter array element:");
        for(int i=0;i<a.length;i++)
        {
                a[i]=sc.nextInt();
        }
        System.out.println("\n-------------------------");
        System.out.print("Orignal array element:");
        for(int i=0;i<a.length;i++)
        {
                System.out.print(a[i]+" ");

        }
        for(int i=0;i<a.length;i++)
        {
                for(int j=i+1;j<a.length;j++)
                {
                        if(a[i]<a[j])
                        {
                                int t=a[i];
                                a[i]=a[j];
                                a[j]=t;
                        }
                }
        }
        System.out.println("\n-------------------------");
        System.out.print("Descending array element:");
        for(int i=0;i<a.length;i++)
        {
                System.out.print(a[i]+" ");

        }
        System.out.println("\n-------------------------");

    }
}
```