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IT623 - Lab Assignment 1

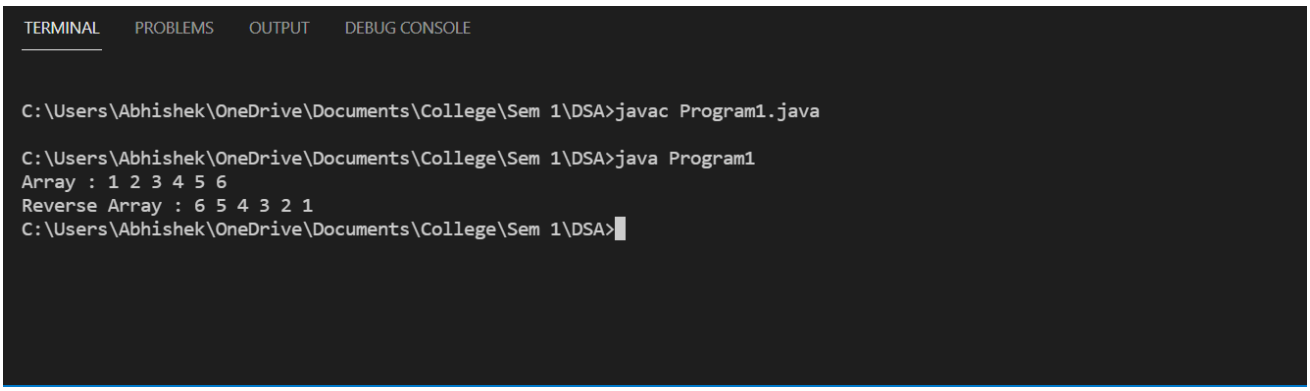
1. **Traverse the array and print the elements in all possible order**.

   Code:

```
class Program1 {
	public static void main(String[] args) {
		int[] arr = { 1, 2, 3, 4, 5, 6 };

		System.out.println("Array : ");
		for (int i = 0; i < arr.length; i++) {
			System.out.println(arr[i]);
		}
	}
}
```

   Output Snapshot:



2. Delete the element of specified position in the array.

Code:

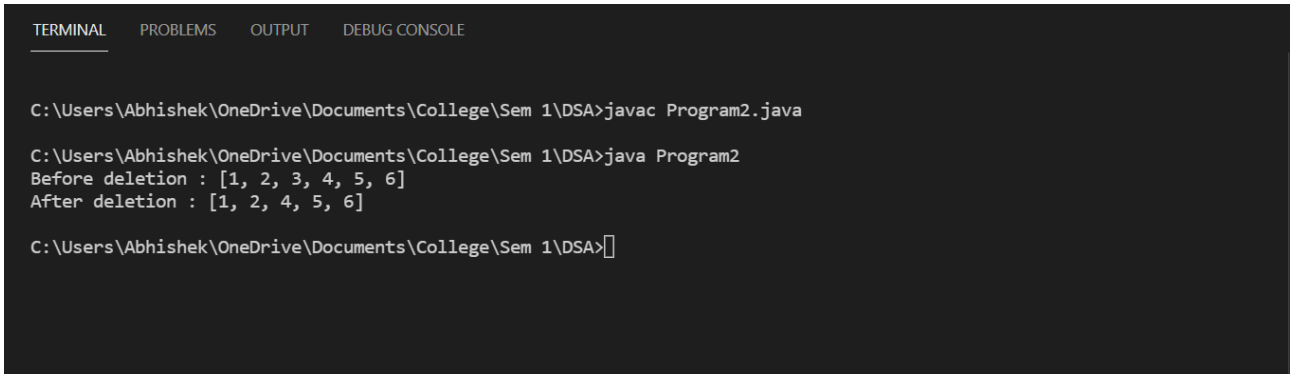
```
import java.util.Arrays;

public class Program2 {
    public static void main(String[] args) {

        int[] arr = { 1, 2, 3, 4, 5, 6 };
        int[] arr_new = new int[arr.length - 1];
        int j = 2;

        for (int i = 0, k = 0; i < arr.length; i++) {
            if (i != j) {
                arr_new[k] = arr[i];
                k++;
            }
        }
        System.out.println("Before deletion : " + Arrays.toString(arr));
        System.out.println("After deletion : " + Arrays.toString(arr_new));
    }
}
```

Output Snapshot:



3. Print the minimum number and the maximum number of the array.

Code:

```
public class Program3 {
    public static void main(String[] args) {
        int[] arr = { 1, 2, 3, 4, 5, 6 };
        int min, max;

        max = arr[0];
        min = arr[0];

        for (int i = 0; i < arr.length; i++) {
            if (arr[i] > max) {
                max = arr[i];
            } else if (arr[i] < min) {
                min = arr[i];
            }
        }

        System.out.println("Minimum array element : " + min);
        System.out.println("Maximum array element : " + max);
    }
}
```

Output Snapshot:

4. Sum the array elements and print the result.

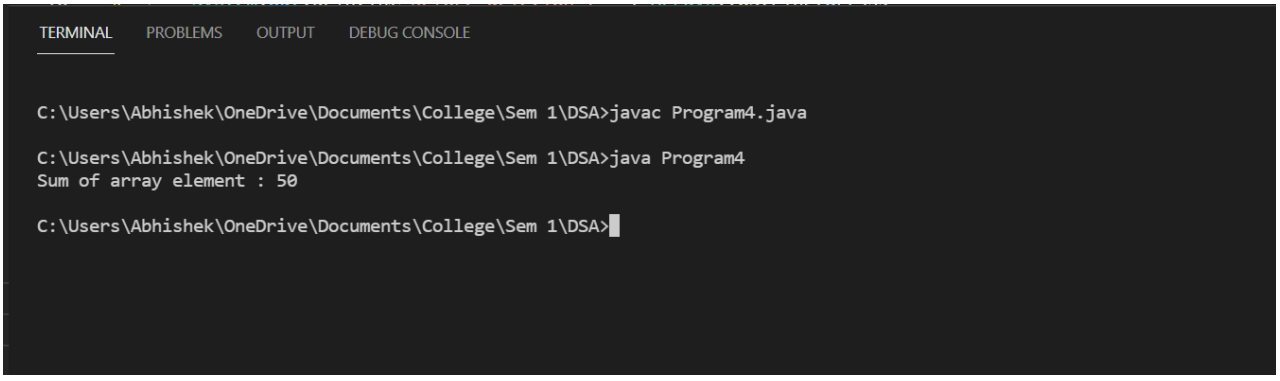
Code:

```
public class Program4 {
    public static void main(String[] args) {
        int[] arr = { 5, 10, 15, 20 };
        int sum = 0;

        for (int i = 0; i < arr.length; i++) {
            sum += arr[i];
        }

        System.out.println("Sum of array element : " + sum);
    }
}
```

Output Snapshot:



5. Insert an element at the last position.

Code:

```
import java.util.Arrays;

public class Program5 {
    public static void main(String[] args) {
        int[] arr = { 1, 2, 3, 4, 5, 6 };
        int value = 8;
        int no = arr.length;
        int[] newArr = new int[no + 1];

        for (int i = 0; i < arr.length; i++) {
            newArr[i] = arr[i];
        }
        newArr[no] = value;

        System.out.println("Before inserting element : " + Arrays.toString(arr));
        System.out.println("After inserting element at the last position : " +
Arrays.toString(newArr));
    }
}
```

Output Snapshot: