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Test: 4

Set 1

Q.1) Print unique sorted array Accept data in sorted order having duplicate value. You need to print unique array using single loop . Unique sorted array using 1 loop Input 1 1 2 2 2 5 output 1 2 5

```
package test4;

import java.util.Arrays;
import java.util.Scanner;

public class Ques1 {

	public static void uniqueArray(int arr[])
	{
		Arrays.sort(arr);
		int previous=Integer.MIN_VALUE;

		int n=arr.length;


		for(int i=0;i<n;i++)
		{
			if(arr[i]!=previous)
			{
				System.out.print(arr[i]+" ");
				previous=arr[i];
			}

		}
	}

	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		int arr[]=new int[8];

		System.out.println("Enter array elements");
		for(int i=0;i<arr.length;i++)
		{
			arr[i]=sc.nextInt();
		}

		uniqueArray(arr);

	}

}
```

Q.2) To find the maximum sum of all subarrays of size K: Given an array of integers of size ‘n’, Our aim is to calculate the maximum sum of ‘k’ consecutive elements in the array. Input : arr[] = {100, 200, 300, 400}, k = 2 Output : 700

```java
package test4;

public class Ques2 {

	static int sumk(int arr[],int k)
	{
		int n=arr.length;

		if(n<k)
		{
			return -1;
		}
		int max_sum=0;

		for(int i=0;i<k;i++)
		{
			max_sum +=arr[i];
		}
		int window_sum=max_sum;

		for(int i=k;i<n;i++)
		{
			window_sum=window_sum + arr[i] - arr[i-k];
			max_sum=Math.max(max_sum, window_sum);
		}

		return max_sum;
	}
	public static void main(String[] args) {
		int arr[] = {100, 200, 300, 400};
		int k = 2;

		int res=sumk(arr,k);
		System.out.println(res);
	}

}
```