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Batch Code : Java_ANP-C6315

Lab Assignment – 8

Q1: Write a Java program that creates and prints a 2D array in the following format:

input :

1

23

14

21

5

14

output :

01 23 14

21 05 13

Input:

```
package CoreJava;
import java.util.Scanner;
public class TwoDArray {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scanner = new Scanner(System.in);
// Get the size of the array
System.out.println("Enter the number of rows: ");
int rows = scanner.nextInt();
System.out.println("Enter the number of columns: ");
int columns = scanner.nextInt();
```

```
        // Create the array
        int[][] array = new int[rows][columns];
        // Get the values for the array
        System.out.println("Enter the values for the array: ");
        for (int i = 0; i < rows; i++) {
            for (int j = 0; j < columns; j++) {
                array[i][j] = scanner.nextInt();
            }
        }
        // Print the array
        System.out.println("The array is: ");
        for (int i = 0; i < rows; i++) {
            for (int j = 0; j < columns; j++) {
                System.out.print(array[i][j] + " ");
            }
            System.out.println();
            scanner.close();
        }
    }


      }
```

Output:

Enter the number of rows:
2
Enter the number of columns:
3
Enter the values for the array:
1
23
14
21
5
14
The array is:
1 23 14
21 5 14

Q2 : Write a program to sort an array elements. Read elements and display sorted array elements.

Input:

```
package CoreJava;
import java.util.Arrays;
import java.util.Scanner;
public class SortArray {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		  Scanner scanner = new Scanner(System.in);
		// Get the size of the array
		System.out.println("Enter the number of elements: ");
		int size = scanner.nextInt();
		// Create the array
		int[] array = new int[size];
		// Get the values for the array
		System.out.println("Enter the elements: ");
		for (int i = 0; i < size; i++) {
		   array[i] = scanner.nextInt();
		}
		// Sort the array
		Arrays.sort(array);
		// Print the sorted array
		System.out.println("The sorted array is: ");
		for (int i = 0; i < size; i++) {
		   System.out.println(array[i]);
		   scanner.close();
		}
	}

}
```

Output:

```
Enter the number of elements:
6
Enter the elements:
-9
-87
0
3
```

67
-6
The sorted array is:
-87
-9
-6
0
3
67