

1. Write a program in Java to right rotate an array by 5 steps

```
package javaFsd3;
import java.util.*;

public class rightRotateArray {

    public static void main(String[] args) {

        int[] arr = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};
        int n = arr.length;
        int k = 5; // Number of steps to rotate by

        System.out.println("Original Array: " + Arrays.toString(arr));

        // Create a temporary array to store the last k elements
        int[] temp = new int[k];
        for (int i = 0; i < k; i++) {
            temp[i] = arr[n - k + i];
        }

        // Shift the first n-k elements to the right by k steps
        for (int i = n - k - 1; i >= 0; i--) {
            arr[i + k] = arr[i];
        }

        // Copy the last k elements from the temporary array to the beginning of the
        original array
        for (int i = 0; i < k; i++) {
            arr[i] = temp[i];
        }

        // Print the rotated array
        System.out.println("Array after rotating " + k + " steps: " +
            Arrays.toString(arr));
    }
}
```

Output

```
Console ×  
<terminated> rightRotateArray [Java Application] C:\Users\JOTHIKA\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v2  
Original Array: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]  
Array after rotating 5 steps: [6, 7, 8, 9, 10, 1, 2, 3, 4, 5]
```