

Practice assisted project phase 1

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

```
package Main;

public class RotateRight {
    public static void main(String[] args) {
        //Initialize array
        int [] arr = new int [] {1, 2, 3, 4, 5};
        //n determine the number of times an array should be rotated.
        int n = 3;

        //Displays original array
        System.out.println("Original array: ");
        for (int i = 0; i < arr.length; i++) {
            System.out.print(arr[i] + " ");
        }

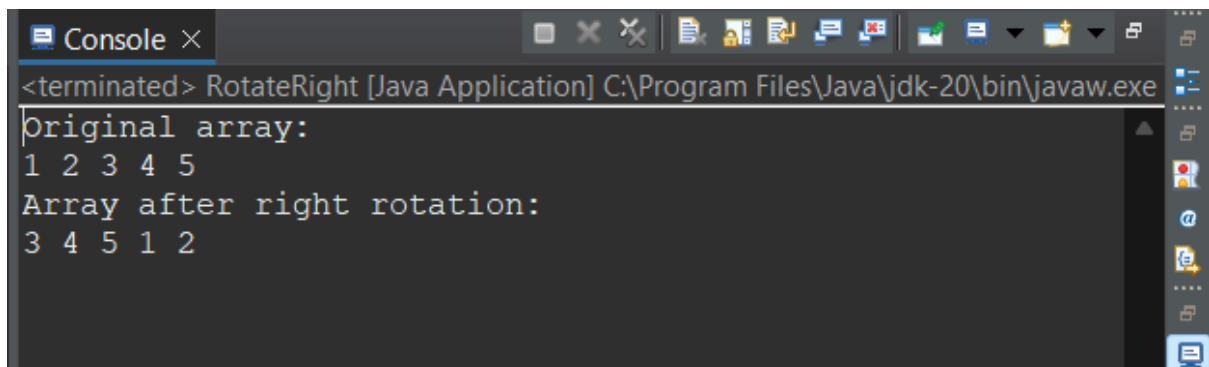
        //Rotate the given array by n times toward right
        for(int i = 0; i < n; i++){
            int j, last;
            //Stores the last element of array
            last = arr[arr.length-1];

            for(j = arr.length-1; j > 0; j--){
                //Shift element of array by one
                arr[j] = arr[j-1];
            }
            //Last element of array will be added to the start of
            array.
            arr[0] = last;
        }

        System.out.println();

        //Displays resulting array after rotation
        System.out.println("Array after right rotation: ");
        for(int i = 0; i < arr.length; i++){
            System.out.print(arr[i] + " ");
        }
    }
}
```

OUTPUT-

A screenshot of a Java IDE's console window. The title bar reads "Console x". The main text area shows the output of the program: "<terminated> RotateRight [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe", followed by "Original array:", "1 2 3 4 5", "Array after right rotation:", and "3 4 5 1 2". The right side of the window shows a vertical toolbar with various icons for file operations and debugging.

```
<terminated> RotateRight [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe
Original array:
1 2 3 4 5
Array after right rotation:
3 4 5 1 2
```