Problem Statement:

Rotate an Array Right by K Positions

Write a program to rotate an array right by k positions without using any built-in array or rotation functions. For example, rotating [1, 2, 3, 4, 5] by 2 would give [4, 5, 1, 2, 3].

Instructions: You should implement the logic manually for rotating the array.

**Program Code (Java):**

```
public class RotateArray {
    public static void rotateRight(int[] arr, int k) {
        int n = arr.length;
        int[] temp = new int[n];

        for (int i = 0; i < n; i++) {
            temp[(i + k) % n] = arr[i];
        }

        for (int i = 0; i < n; i++) {
            arr[i] = temp[i];
        }
    }

    public static void main(String[] args) {
        int[] arr = {1, 2, 3, 4, 5};
        int k = 2; // Number of positions to rotate
```

```
        rotateRight(arr, k);


        System.out.print("Rotated Array: ");
        for (int num : arr) {
            System.out.print(num + " ");
        }
    }
}
```

**Sample Inputs and Outputs:**

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1. Input: arr = [1, 2, 3, 4, 5], k = 2

   Output: [4, 5, 1, 2, 3]

2. Input: arr = [10, 20, 30, 40, 50], k = 3

   Output: [30, 40, 50, 10, 20]

3. Input: arr = [7, 8, 9, 10], k = 1

   Output: [10, 7, 8, 9]