1.Write a C Program to rotate an array by K positions.

Circular array rotation means rotating the elements in the array where one rotation operation moves the last element of the array to the first position and shifts all remaining elements to the right.

For example, consider the following array = [4, 5, 6],  
• Initial array [4, 5, 6]  
• After one rotation [6, 4, 5]  
• After two rotations [5, 6, 4]

OUTPUT

Element at index 0: 5  
Element at index 1: 6  
Element at index 2: 4

**Code:**

#include <stdio.h>

int main()

{

int arr[] = {4, 5,6};

int length = sizeof(arr)/sizeof(arr[0]);

int n = 2;

printf("Original array: \n");

for (int i = 0; i < length; i++) {

printf("%d ", arr[i]);

}

for(int i = 0; i < n; i++){

int j, last;

last = arr[length-1];

for(j = length-1; j > 0; j--){

arr[j] = arr[j-1];

}

arr[0] = last;

}

printf("\n");

printf("Array after right rotation: \n");

for(int i = 0; i< length; i++){

printf("%d ", arr[i]);

}

return 0;

}

**Output:**

