

```
/*
```

A4. rotate array every kth element

1 2 3 4 5 6 7 8 9

k= 3

3 2 1 6 5 4 9 8 7

```
*/
```

```
#include <stdio.h>
```

```
void revSeg(int arr[], int start, int end)
```

```
{
```

```
    while (start < end)
```

```
    {
```

```
        int temp = arr[start];
```

```
        arr[start] = arr[end];
```

```
        arr[end] = temp;
```

```
        start++;
```

```
        end--;
```

```
    }
```

```
}
```

```
void rotateArray(int arr[], int n, int k)
```

```
{
```

```
    for (int i = 0; i < n; i += k)
```

```
    {
```

```
        int end;
```

```
        if (i + k - 1 < n)
        {
            end = i + k - 1;
        }
        else
        {
            end = n - 1;
        }

        revSeg(arr, i, end);
    }
}
```

```
void printArray(int arr[], int n)
{
    for (int i = 0; i < n; i++)
    {
        printf("%d ", arr[i]);
    }
    printf("\n");
}
```

```
int main()
{
    int arr[] = {1, 2, 3, 4, 5, 6, 7, 8, 9};
    int n = sizeof(arr) / sizeof(arr[0]);
    int k = 3;
```

```
printf("Original array is: ");  
printArray(arr, n);  
  
rotateArray(arr, n, k);  
  
printf("Rotated array is: ");  
printArray(arr, n);  
  
return 0;  
}
```