Write a program in C to rotate an array by N positions

#include <stdio.h>

void shiftArrayOnePosition(int \*array, int size) {

int i, temp;

/\*Save first element in a temporary variable and

shift remaining elements by one index left \*/

temp = array[0];

for(i = 0; i< size-1; i++) {

array[i] = array[i+1];

}

/\* Now put the firt element of

original array to last index \*/

array[i] = temp;

}

/\*

This function shifts array by N positions

\*/

void rotateArray(int \*array, int size, int N){

int i;

for(i = 0; i< N; i++){

shiftArrayOnePosition(array, size);

}

return;

}

int main(){

int i,n,N;

printf("enter the size of the array: ");

scanf("%d",&n);

int array[n];

printf("enter the array elements: ");

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

scanf("%d",&array[i]);

printf("Enter the Position N from where you want to rotate:");

scanf("%d",&N);

printf("Original Array\n");

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

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

}

rotateArray(array, n,N);

printf("\nRotated Array\n");

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

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

}

return 0;

}

OUTPUT

