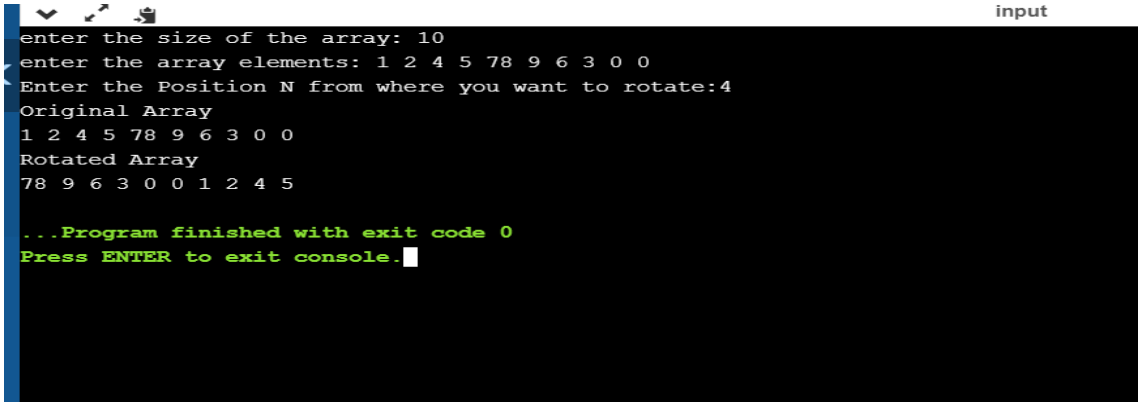
Write a program in C to rotate an array by N positions

```
#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


input
enter the size of the array: 10
enter the array elements: 1 2 4 5 78 9 6 3 0 0
Enter the Position N from where you want to rotate:4
Original Array
1 2 4 5 78 9 6 3 0 0
Rotated Array
78 9 6 3 0 0 1 2 4 5
...Program finished with exit code 0
Press ENTER to exit console.