Insert element in an array in c

/ C Program to Insert an element at a specific position in an Array

#include<stdio.h>

int main()

{

int arr[100] = { 0 };

int i, x, pos, n = 10;

// initial array of size 10

for (i=0; i<10; i++)

{

printf("Insert the %d element: ",i+1);

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

printf("\n");

}

// print the original array

printf("The original array is:\n");

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

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

printf("\n");

// element to be inserted

printf("Insert the element that you want to be inserted:");

scanf("%d",&x);

// position at which element

// is to be inserted

printf("Insert the position at which you want to enter the element:");

scanf("%d",&pos);

// increase the size by 1

n++;

// shift elements forward

for (i = n - 1; i >= pos; i--)

arr[i] = arr[i - 1];

// insert x at pos

arr[pos - 1] = x;

// print the updated array

printf("The updated array is:\n");

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

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

printf("\n");

return 0;

}

