

*****WRITE A C Program to INSERT ELEMENTS IN ARRAY*****

```
#include<stdio.h>
int main()
{
    // original array
    int arr[] = {10, 20, 30, 40, 50};

    // take position and element
    int index, key;
    printf("Enter position: ");
    scanf("%d", &index);
    printf("Enter element to insert: ");
    scanf("%d", &key);

    // calculate size of the array
    int n = sizeof(arr)/sizeof(arr[0]);

    // check position
    if(index < 0 || index > n)
    {
        printf("Error! The position is not valid.");
        printf("\nPlease, Enter position from 0 to %d\n", n);
        return 0;
    }

    // create new array of size = n+1
    int temp[n+1];

    // copy elements
    for (int i=0, j=0; i <= n; ++i)
    {
        if(i == index)
            temp[i] = key;
        else
            temp[i] = arr[j++];
    }

    // display new array
    printf("Array elements are: \n");
    for (int i = 0; i <= n; ++i)
    {
        printf("%d ", temp[i]);
    }

    return 0;
}
```

*****WRITE A C Program to DELETE ELEMENTS FROM ARRAY USING POSITION*****

```
#include<stdio.h>
// function to display array
void display(int arr[], int n)
{
    for (int i = 0; i < n; ++i)
        printf("%d ", arr[i]);
}

// main function
int main()
{
    // original array
    int arr[] = {10, 20, 30, 40, 50};

    // take index to remove
    int index;
    printf("Enter index: ");
    scanf("%d", &index);

    // calculate size of the array
    int n = sizeof(arr)/sizeof(arr[0]);

    // check index is valid or not
    if(index < 0 || index > n-1)
    {
        printf("Error! the index is not valid.");
        printf("\nEnter index from 0 to %d\n", n-1);
        return 0;
    }

    // display original array
    printf("Original array: ");
    display(arr, n);

    // create new array of size = n-1
    int temp[n-1];

    // copy elements
    for (int i=0, j=0; i < n; ++i)
    {
        // skip at index position
        if(i == index) continue;
        else temp[j++] = arr[i];
    }
}
```

```
// display new array
printf("\nNew Array: ");
display(temp, n-1);

return 0;
}
```