INSERT SORTED

```c
    /****    Program to Insert an Element into Sorted Array    ****/

#include <stdio.h>

void insert_sorted();

int a[50], n, item;

main()
{
    int i;

    printf("\nEnter size of an array: ");
    scanf("%d", &n);

    printf("\nEnter sorted elements of an array:\n");
    for(i=0; i<n; i++)
        scanf("%d", &a[i]);

    printf("\nEnter ITEM to insert: ");
    scanf("%d", &item);

    insert_sorted();

    printf("\n\nAfter insertion:\n");
    for(i=0; i<n; i++)
        printf("\n%d", a[i]);
    getch();
}

void insert_sorted()
{
    int i = n-1;

    while(item<a[i] && i>=0)
    {
        a[i+1] = a[i];
        i--;
    }

    a[i+1] = item;
    n++;
}
```