

```
/*Implement insertion sort to sort the elements of any user entered array in ascending order. */
```

```
#include <stdio.h>
```

```
void insertionsort(int[], int);
```

```
main()
```

```
{
    int a[20], i, n;
    printf("Enter the number of elements in the array");
    scanf("%d", &n);
    printf("Enter the array elements");
    for (i = 0; i < n; i++)
    {
        scanf("%d \t", &a[i]);
    }
    printf("The unsorted array is %d", a[i]);
}
```

```
void insertionsort(int a[], int n)
```

```
{
    int key, i, j, ;
    for (i = 1; i < n; i++)
    {
        key = a[i];
        j = i - 1;
        while (j >= 0 && a[j] > key)
        {
            a[j + 1] = a[j];
            j = j - 1;
        }
        a[j + 1] = key;
    }
}
```

ANIRUDH PANDA

ROLL - 16(D2)