

C:\Users\Admin\OneDrive\Desktop\4th sem\ADA lab\ADA lab programs\Insertion sort\insertion-sort.cpp - Dev-C++ 5.11

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TDM-GCC 4.9.2 64-bit Release

(globals)

insertion-sort.cpp

```
1 #include<stdio.h>
2 #include<time.h>
3 void sort(int a[],int n);
4 int main()
5 {
6     clock_t t;
7     int n;
8     printf("\nEnter the Number Of Elements Of The Array\n");
9     scanf("%d",&n);
10    int a[n];
11    printf("Enter the elements of the array\n");
12    for(int i=0;i<n;i++)
13        scanf("%d",&a[i]);
14    t=clock();
15    sort(a,n);
16    t=clock()-t;
17    double time_taken=((double)t)/CLOCKS_PER_SEC;
18    printf("Time Taken =%f\n",time_taken);
19
20    printf("Final Sorted Order Is\n");
21    for(int i=0;i<n;i++)
22    {
23        printf("%d\t",a[i]);
24    }
25
26 }
27 void sort(int a[],int n)
28 {
29     int v,j;
30     for(int i=1;i<=n-1;i++)
31     {
32         v=a[i];
33         j=i-1;
34         while(j>=0 && a[j]>v)
35         {
36             a[j+1]=a[j];
37             j=j-1;
38         }
39         a[j+1]=v;
40     }
41 }
42 }
```

Compiler Resources Compile Log Debug Find Results

Line: 1 Col: 1 Sel: 0 Lines: 42 Length: 814 Insert Done parsing in 0.031 seconds

Type here to search

ENG 12:50 13-05-2021

```
insertionEnter the Number Of Elements Of The Array
5
Enter the elements of the array
123
33
5
17
99
Time Taken =0.000000
Final Sorted Order Is
5    17    33    99    123
-----
Process exited after 19.83 seconds with return value 0
Press any key to continue . . .
```

```
26 }
27 void sort(int a[] ,int n)
28 {
29     int v,j;
30     for(int i =1;i <=n-1;i++)
31     {
32         v=a[i];
33         j=i-1;
34         while(j >=0 && a[j]>v)
35         {
36             a[j+1]=a[j];
37             j=j-1;
38         }
39         a[j+1]=v;
```

Abort Compilation

☐ Shorten compiler paths

Compilation results...

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Admin\OneDrive\Desktop\4th sem\ADA lab\ADA lab programs\Insertion sort\insertion-sort.exe
- Output Size: 130.46875 KiB
- Compilation Time: 0.14s
```



