

Insertion Sort Implementation

❖ Source Code:

```
#include<stdio.h>
int main()
{
    int i,j,n,key;
    printf("enter the size of array: ");
    scanf("%d",&n);
    int a[n];
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);
    for(i=1;i<n;i++)
    {key=a[i];
    {for(j=i-1;j>=0&& a[j]>key;j--)
        a[j+1]=a[j];
    }
    a[j+1]=key;
    }
    for(i=0;i<n;i++)
        printf(" \n %d",a[i]);
    return 0;
}
```

❖ Output :

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DAA LAB Assignment

```
C:\Users\gaurav\Desktop\InsertionSort.exe
enter the size of array: 10
7
345
67
0
23
089
776
7878
65
43476
-7
0
23
65
67
89
345
776
7878
43476
Process returned 0 (0x0)   execution time : 28.764 s
Press any key to continue.
```