```c
/* NAME            :MOHAMMED SINAN.P
   ROLL.NO         :39
   DATE            :13/10/22
   PROGRAM         :INSERTION SORT
   INSTITUTION     :MES COLLEGE OF ENGINEERING */


#include<stdio.h>
void main()
{
        int i,j,x,a[100],n,k;
        printf("Enter the number of elements");
        scanf("%d",&n);
        printf("Enter the array");
        for(i=0;i<n;i++)
        {
                scanf("%d",&a[i]);
        }
        for(i=1;i<n;i++)
        {
                printf("pass %d: ",i);
                x=a[i];
                j=i-1;
                while(j>=0 && a[j]>x)
                {
                        a[j+1]=a[j];
                        j--;
                }
                a[j+1]=x;
                for(k=0;k<n;k++)
                {
                        printf("%d\t",a[k]);
                }
                printf("\n");

        }
        printf("The sorted array is : ");
        for(i=0;i<n;i++)
        {
                printf("\t%d",a[i]);
        }

}
```

Output :-

Enter the number of elements
5
Enter the array
64
25
12
22
10

```
pass 1: 25     64     12     22     10
pass 2: 12     25     64     22     10
pass 3: 12     22     25     64     10
pass 4: 10     12     22     25     64

The sorted array is :     10     12     22     25     64
```