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

void insertion_sort(int x[],int length)
{
  int key,i,j;
  for(j=1;j<length;j++)
  {
     key=x[j];
     i=j-1;
     while(x[i]>key && i>=0)
     {
              x[i+1]=x[i];
        i--;
     }
     x[i+1]=key;
  }
}

void main()
{
  void insertion_sort(int [],int);
  int A[100];
  int x=0,n=0;
  clrscr();
  printf("******INSERTION SORT******");
  printf("\n\nENTER THE LIMIT : ");
  scanf("%d",&n);
  printf("\n\nENTER THE ELEMENTS ONE BY ONE\n\n");
  for(x=0;x<n;x++)
  scanf("%d",&A[x]);
  printf("\n\nNON SORTED LIST\n\n");
  for(x=0;x<n;x++)
  {
      printf("\n%d",A[x]);
  }
  insertion_sort(A,n);
  printf("\n\nSORTED LIST\n\n");
  for(x=0;x<n;x++)
  {
      printf("\n%d",A[x]);
  }
```

```
  getch();
}
```

-->>SAMPLE INPUT AND OUTPUT:

```
 ENTER THE LIMIT : 5

ENTER THE ELEMENTS ONE BY ONE

5
4
3
2
1

SORTED LIST
1
2
3
4
5
```