

```

#include<stdio.h>
#include<conio.h>
void shell(int a[],int n);
int i,j,k,n,temp,array[25];
void main()
{
    clrscr();
    printf("\n SHELL SORT");
    printf("\n *****");
    printf("\n Enter the limit:");
    scanf("%d",&n);
    printf("\n Enter the elements\n\n");
    for(i=0;i<n;i++)
        scanf("%d",&array[i]);
    shell(array,n);
    printf("\n Sorted list:");
    for(i=0;i<n;i++)
        printf("\n %d",array[i]);
    getch();
}

```

```

void shell(int a[],int n)
{
    for(i=(n+1)/2;i>=1;i/=2)
    {
        for(j=i;j<=n-1;j++)
        {
            temp=a[j];
            k=j-i;
            while(k>=0&&temp<a[k])
            {
                a[k+i]=a[k];
                k=k-i;
            }
            a[k+i]=temp;
        }
    }
}

```

-->>SAMPLE INPUT AND OUTPUT:

Enter the limit: 5

Enter the elements

5
4
3
2
1

Sorted list:

1
2
3
4
5