**Program :**

void shellsort(int arr[], int num)

{

int i, j, k, tmp;

for (i = num / 2; i > 0; i = i / 2)

{

for (j = i; j < num; j++)

{

for(k = j - i; k >= 0; k = k - i)

{

if (arr[k+i] >= arr[k])

break;

else

{

tmp = arr[k];

arr[k] = arr[k+i];

arr[k+i] = tmp;

}

}

}

}

}

void main()

{

int n,i,f,c=0,j,t,min;

printf("Enter The Number of Elements : ");

scanf("%d",&n);

printf("Enter The ELements : \n");

int a[n];

for(i=0;i<n;i++)

scanf("%d",&a[i]);

printf("Before Swapping : \n");

for(i=0;i<n;i++)

printf("%d\t",a[i]);

shellsort(a,n);

printf("\nAfter Swapping : \n");

for(i=0;i<n;i++)

printf("%d\t",a[i]);

}