



```
#include <stdio.h>

void heapsort(int x[ ],int n)
{
int i,t,pos,p;
for(i=1;i<n;i++)
{
    pos=i;
    do{
        p=(pos-1)/2;

        if(pos==0||x[p]>=x[pos]) break;

        t=x[pos];
        x[pos]=x[p];
        x[p]=t;

        pos=p;
    }while(1);
}

t=x[0];
x[0]=x[n-1];
x[n-1]=t;
}
```

```
void main( )
{
int n,x[100],i;
printf("Feed in the number of elements: ");
scanf("%d",&n);

printf("Feed in the elements:\n");
for(i=0;i<n;i++)
scanf("%d",&x[i]);

for(i=0;i<n-1;i++)
    heapsort(x,n-i);

printf("The sorted list is: ");
for(i=0;i<n;i++)
    printf("%d\t",x[i]);

printf("\n");
}
```