```c
#include<stdio.h>
#include<time.h>
void sort(int a[],int n);
int main()
{
    clock_t t;
    int n;
    printf("\nEnter the Number Of Elements Of The Array\n");
    scanf("%d",&n);
    int a[n];
    printf("Enter the elements of the array\n");
    for(int i=0;i<n;i++)
        scanf("%d",&a[i]);
    t=clock();
    sort(a,n);
    t=clock()-t;
    double time_taken=((double)t)/CLOCKS_PER_SEC;
    printf("Time Taken =%f\n",time_taken);

    printf("Final Sorted Order Is\n");
    for(int i=0;i<n;i++)
    {
        printf("%d\t",a[i]);
```

```
20      printf("Final Sorted Order Is\n");
21      for(int i=0;i<n;i++)
22      {
23          printf("%d\t",a[i]);
24      }
25
26  }
27  void sort(int a[] ,int n)
28  {
29      int v,j;
30      for(int i=1;i<=n-1;i++)
31      {
32          v=a[i];
33          j=i-1;
34          while(j>=0 && a[j]>v)
35          {
36              a[j+1]=a[j];
37              j=j-1;
38          }
39          a[j+1]=v;
40
41      }
42  }
```

```
clang-7 -pthread -lm -o main main.c
./main

Enter the Number Of Elements Of The Array
3
Enter the elements of the array
4
7
2
Time Taken =0.000002
Final Sorted Order Is
2   4   7
```