

main.c

```
1  #include<stdio.h>
2  #include <stdlib.h>
3  #include<time.h>
4
5  int main(){
6      int last,arr[5000];
7      clock_t end,start;
8      printf("Enter the Size of array :");
9      scanf("%d",&last);
10     srand(time(NULL));
11     for(int i=0;i<last;i++){
12         arr[i]=rand()%100;
13         printf("%d\t",arr[i]);
14     }printf("\n");
15     start=clock();
16     for(int i=0;i<last-1;i++){
17         int j=i+1;
18         for(;j<last;j++){
19             if(arr[j]<arr[i]){
20                 arr[i]+=arr[j];
21                 arr[j]=arr[i]-arr[j];
22                 arr[i]=arr[i]-arr[j];
23             }
24         }
25     }
26     end=clock();
27     printf("Time in sec %f\n",(((double)(end-start))/CLOCKS_PER_SEC));
28     for(int i=0;i<last;i++){
29         printf("%d\t",arr[i]);
30     }
31 }
```

Console

Shell

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

```
> ./main
```

```
Enter the Size of array :6
```

```
57 7 97 89 27 82
```

```
Time in sec 0.000006
```

```
7 27 57 82 89 97 >
```

Console

Shell

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

```
> ./main
```

```
Enter the Size of array :7
```

```
22 62 49 19 35 35 77
```

```
Time in sec 0.000007
```

```
19 22 35 35 49 62 77 > |
```

Q x

Console

Shell

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

```
> ./main
```

```
Enter the Size of array :8
```

```
62 10 58 73 54 28 4 56
```

```
Time in sec 0.000003
```

```
4 10 28 54 56 58 62 73 > |
```

Q x