Code, Compile & Run

Contest Code/Name (e.g. JULY15/PRACTICE)	Problem Code/Name (e.g. TEST)	Select

C (gcc 6.3) ▼   💾   🗑   Code gets autosaved every second   ℹ   ⬇   ⤢   ⚙

```c
1   #include<stdio.h>
2
3   int main()
4 ▾ {
5       int a[50], size, i, big, small;
6
7       printf("\nEnter the size of the array: ");
8       scanf("%d", &size);
9
10      printf("\n\nEnter the %d elements of the array: \n\n", size);
11      for(i = 0; i < size; i++)
12      scanf("%d", &a[i]);
13
14      big = a[0];
15      for(i = 1; i < size; i++)
16 ▾    {
17          if(big < a[i])    // if larger value is encountered
18 ▾        {
19              big = a[i]; // update the value of big
20          }
21      }
22      printf("\n\nThe largest element is: %d", big);
23
24      small = a[0];
25      for(i = 1; i < size; i++)
26 ▾    {
27          if(small>a[i])    // if smaller value is encountered
28 ▾        {
                small - a[i]   // undate the value of small
```

31:53   ⟳

Open File	✓ Custom Input	Run

Custom Input

```
5
1 2 3 4 5
```

Status Successfully executed   **Date** 2020-06-06 05:19:21   **Time** 0 sec   **Mem** 9.424 kB   ✗

Input

```
5
1 2 3 4 5
```

Output

```
Enter the size of the array:

Enter the 5 elements of the array:
```

Code, Compile & Run

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C (gcc 6.3) ▼   💾   🗑   Code gets autosaved every second   ℹ️   📥   ↗   ⚙️

```c
 7        printf("\nEnter the size of the array: ");
 8        scanf("%d", &size);
 9
10        printf("\n\nEnter the %d elements of the array: \n\n", size);
11        for(i = 0; i < size; i++)
12        scanf("%d", &a[i]);
13
14        big = a[0];
15        for(i = 1; i < size; i++)
16        {
17            if(big < a[i])    // if larger value is encountered
18            {
19                big = a[i]; // update the value of big
20            }
21        }
22        printf("\n\nThe largest element is: %d", big);
23
24        small = a[0];
25        for(i = 1; i < size; i++)
26        {
27            if(small>a[i])    // if smaller value is encountered
28            {
29                small = a[i];    // update the value of small
30            }
31        }
32        printf("\n\nThe smallest element is: %d", small);
33        return 0;
34    }
```

31:53   ↻

Open File	✓ Custom Input	Run

Custom Input

```
5
1 2 3 4 5
```

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Input

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Output

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Enter the size of the array:

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Input

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1 2 3 4 5
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Output

```
Enter the size of the array:

Enter the 5 elements of the array:
```

Status Successfully executed   **Date** 2020-06-06 05:19:21   **Time** 0 sec   **Mem** 9.424 kB   **✖**

Input

```
5
1 2 3 4 5
```

Output

```
The largest element is: 5

The smallest element is: 1

          Coding is Fun !
```

Algorithm

step 1: Start

step 2: read value for size.

step 3: Enter the element of array

    for (i = 0; i < size; i++)
        read a[i]

step 4: big = a[0].

step 5: for (i = 1; i < size; i++)
            if (big < a[i]).
                big = a[i].

        print till the big value

step 6: small = a[0]

step 7: for (i = 1; i < size; i++)
            if (small > a[i]).
                a[i] = small.

        print the smallest element.

step 8: stop.

flow chart

```
              ( start )
                  |
                  v
          / read size /
                  |
                  v
       / Enter array element /
       /    Read a[i]        /
                  |
                  v
          [ big = a[0] ]
                  |
                  v
               < for >
      ------<( i=1; i< size; )>------ false
      |        < i++ )      |
      |            |        |
      |          True       |
      |            v        |
      |         < if >      |
  false <------< big < a[i] >     |
      |            |        |
      |          True       |
      |            v        |
      |    [ big = a[i]     ]    |
      |----[ Print big value ]    |
                  |              |
                  v              |
          [ small = a[0] ]<------
                  |
                  v
               < for >
      ------<( i=1; i< size )>------ false
      |        < i++ )      |
      |            |        |
      |          True       |
      |            v        |
      |         < if >      |
  false <------< small >    |
      |        < a[i]  >    |
      |            |        |
      |          True       |
      |            v        |
      |    / a[i] = small        /   |
      |----/ Print small value   /   |
                  |                  |
                  v                  |
               ( Stop )<-------------
```