Code, Compile & Run

C (gcc 6.3)

```c
#include <stdio.h>
int largest(int[],int);
int smallest(int[],int);
int main()
{
    int arr[30],size,large,small,i;
    printf("enter the size of the array:");
    scanf("%d",&size);
    printf("enter the %d integer numbers:\n",size);
    for(i=0;i<size;i++)
    {
        scanf("%d",&arr[i]);
    }
    large=largest(arr,size);
    small=smallest(arr,size);
    printf("\nThe largest element is :%d\n",large);
    printf("The smallest element is:%d\n",small);
    return 0;
}
int largest(int arr1[],int size1)
{
    int temp1,i;
    temp1=arr1[0];
    for(i=1;i<size1;i++)
    {
        if(arr1[i]>temp1)
        temp1=arr1[i];
    }
    return(temp1);
```

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Open File ✓ Custom Input Run

Custom Input

```
4
8 2 9 5
```

Status Successfully executed Date 2020-07-08 14:44:18 Time 0 sec Mem 9.424 kB

Input

```
4
8 2 9 5
```

Output

```
enter the size of the array:enter the 4 integer numbers:

The largest element is :9
The smallest element is:2
```

Code, Compile & Run

Idle

C (gcc 6.3)

```
17      printf("The smallest element is:%d\n",small);
18      return 0;
19  }
20  int largest(int arr1[],int size1)
21  {
22      int temp1,i;
23      temp1=arr1[0];
24      for(i=1;i<size1;i++)
25      {
26          if(arr1[i]>temp1)
27          temp1=arr1[i];
28      }
29      return(temp1);
30  }
31  int smallest(int arr2[],int size2)
32  {
33      int temps,j;
34      temps=arr2[0];
35      for(j=0;j<size2;j++)
36      {
37          if(temps>arr2[j])
38          {
39              temps=arr2[j];
40          }
41      }
42      return(temps);
43  }
44
```

33:9

Open File ✓ Custom Input Run

Custom Input

```
4
8 2 9 5
```

Status Successfully executed Date 2020-07-08 14:44:18 Time 0 sec Mem 9.424 kB

Input

```
4
8 2 9 5
```

Output

```
enter the size of the array:enter the 4 integer numbers:

The largest element is :9
The smallest element is:2
```

C program to find smallest and biggest element in an array using functions.

Algorithm:

Step 1: Start
Step 2: input size.
Step 3: Enter the integer numbers
for(i=0; i<size; i++)
input arr[i]
Step 4: large = largest(arr, size)
Step 5: small = smallest(arr, size)
Step 6: Display the largest element
output large
Step 7: Display the smallest element
output small.
Step 8: Stop.

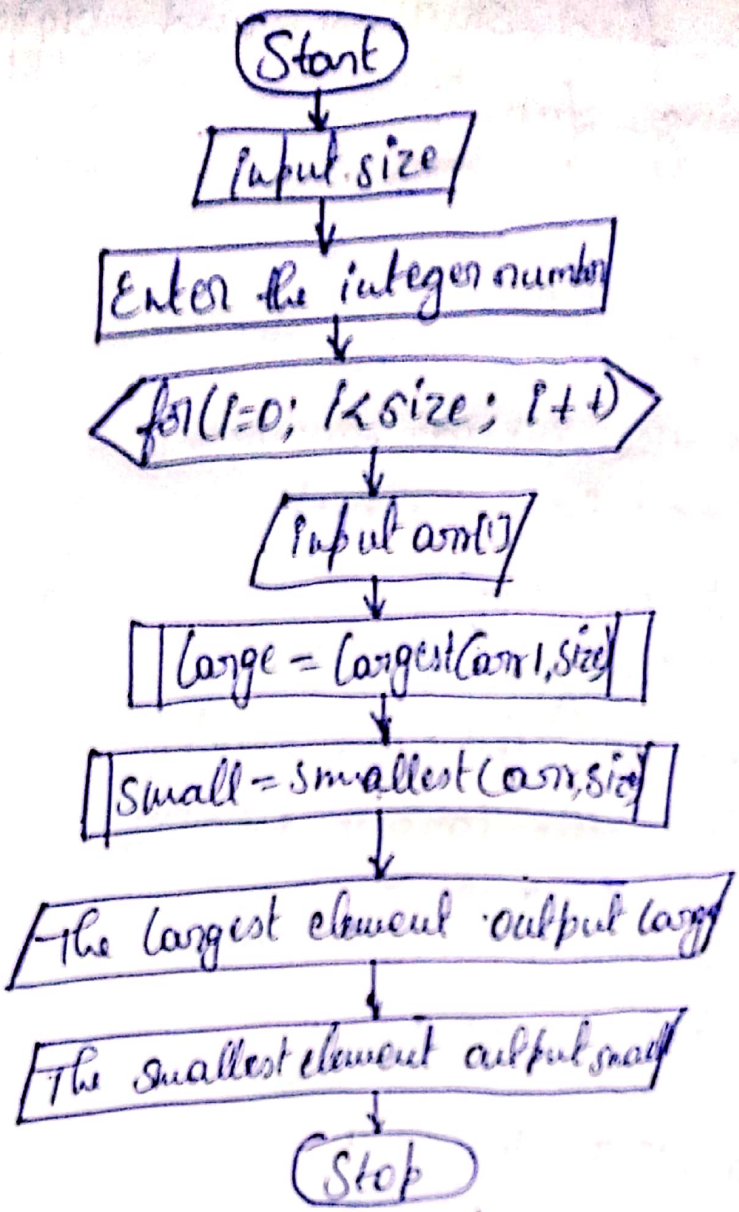
largest(int arr1[], int size1)

step 1: Entry
Step 2: temp1 = arr[0]
Step 3: for(i=1; i<size1; i++)
if(arr1[i]=temp1)
temp1 = arr1[i]
Step 4: return(temp1)

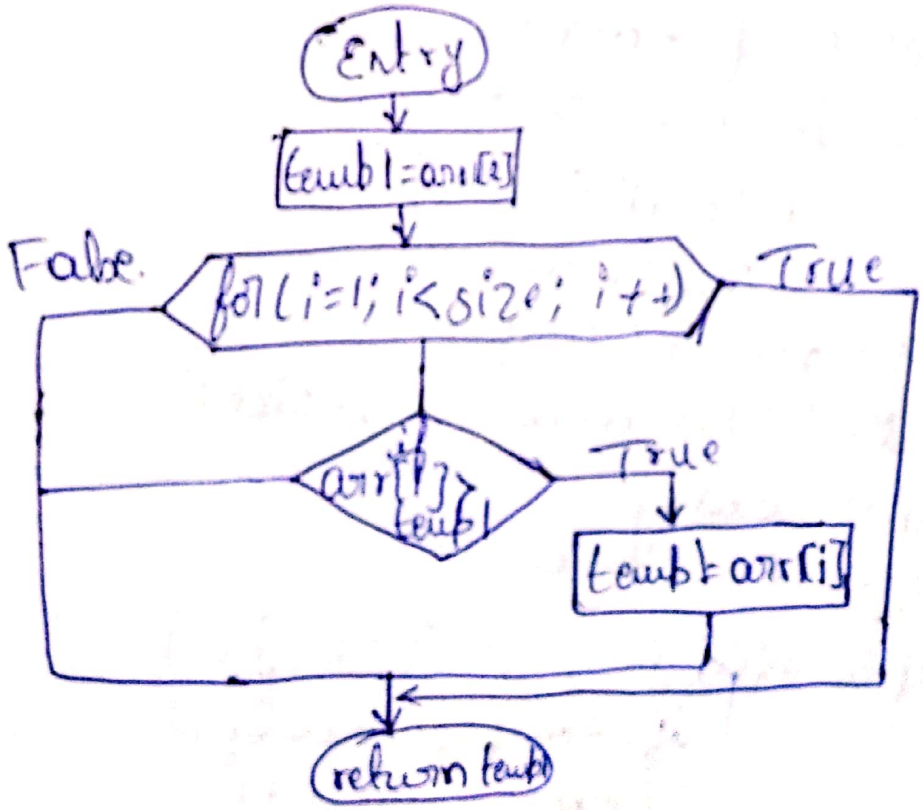
Smallest(int arr2[], int size2)

Step 1: Entry
Step 2: temps = arr[0]
Step 3: for(j=0; j<size2; j++)
if(temps > arr2[j])
temps = arr2[j]
Step 4: return (temps)

Flowchart:



Largest (int arr1[], int size)



Smallest int arr2[], int size.