

Algorithm

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

Step 1: Start

Step 2: Input size

Step 3: Enter the integer number
for $(i=0; i < \text{size};$
Input $\text{arr}[i]$

Step 4: $\text{large} = \text{largest}(\text{arr}, \text{size})$

Step 5: $\text{small} = \text{smallest}(\text{arr}, \text{size})$

Step 6: Display the largest element
output large

Step 7: Display the smallest element
output small

Step 8: stop

$\text{largest}(\text{int arr}[], \text{int size})$

Step 1: Entry

Step 2: $\text{temp} = \text{arr}[0]$

Step 3: for $(i=1; i < \text{size}; i++)$

if $(\text{arr}[i] > \text{temp})$

$\text{temp} = \text{arr}[i]$

Step 4: return (temp)

$\text{smallest}(\text{int arr}[], \text{int size})$

Step 1: Entry

Step 2: $\text{temp} = \text{arr}[0]$

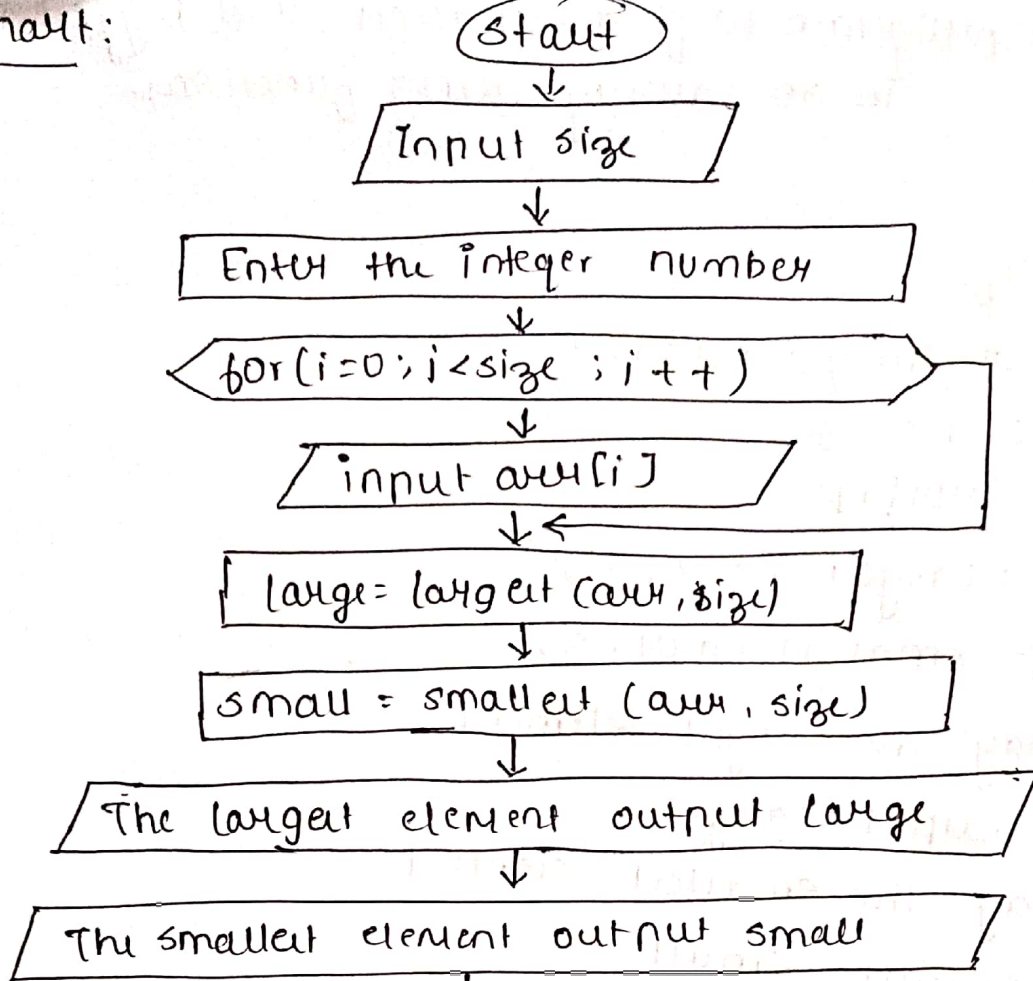
Step 3: for $(j=1; j < \text{size}; j++)$

if $(\text{temp} > \text{arr}[j])$

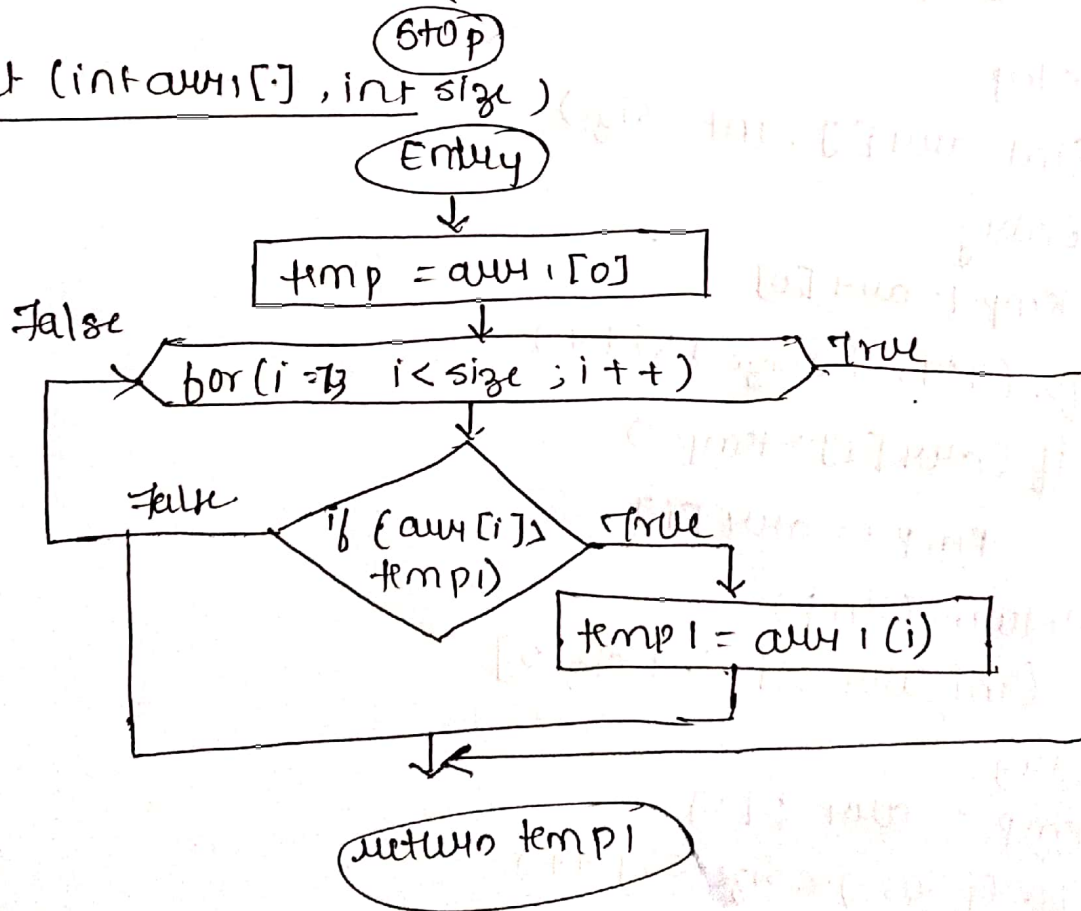
$\text{temp} = \text{arr}[j]$

Step 4: return (temp)

Flowchart:



largest (int arr[], int size)



Smallest (int arr2[], int size)

