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```

1  #include<stdio.h>
2  int main()
3  {
4      int a[20],small2,small,i,n;
5      printf("Enter size of array\n");
6      scanf("%d",&n);
7      printf("%d\n",n);
8      printf("Enter the elements of array\n");
9      for(i=0;i<n;i++)
10     {
11         scanf("%d",&a[i]);
12         printf("%d\t",a[i]);
13     }
14     small=a[0];
15     small2=a[1];
16     if(n<2)
17     {
18         printf("Invalid input\n");
19     }
20     else
21     {
22         for(i=0;i<n;i++)
23         {
24             if(a[i]<small)
25             {
26                 small2=small;
27                 small=a[i];
28             }
29             else
30             if(a[i]<small2&&a[i]!=small)
31             {
32                 small2=a[i];
33             }
34         }
35     }
36     printf("\nThe second smallest element in array is %d",small2);
37     return 0;
38 }

```

Input

```
5
12
98
24
63
50
```

Output

```
Enter size of array
5
Enter the elements of array
12  98  24  63  50
The second smallest element in array is 24
```

Second Smallest element of Array

^{Program}
#include <stdio.h>

int main()

{

int a[20], small2, small, i, n;

printf("Enter size of array\n");

scanf("%d", &n);

printf("Enter the elements of array\n");

for(i=0; i<n; i++)

{
scanf("%d", &a[i]);

}

small = a[0];

small2 = a[1];

if (n < 2)

{
printf("Invalid input\n");

}

else
{ for(i=0; i<n; i++)

{
if (a[i] < small)

{
small2 = small;

small = a[i];

}

else

if (a[i] < small2 && a[i] != small)

{
small2 = a[i];

}

printf("In the second smallest element in
array is %d", small2);

return 0;

Algorithm

step 1 - start

step 2 - Input n

step 3 - for $i=0; i < n; i++$)

Input $a[i]$
[End for]

step 4 - $small = a[0]$

step 5 - $small2 = a[1]$

step 6 - if $(n < 2)$

output "Invalid input"

else [End if]

step 7 - for $i=0; i < n; i++$)

if $(a[i] < small)$

$small2 = small$

$small = a[i]$

else

if $(a[i] < small2 \ \&\& \ a[i] \neq small)$

$small2 = a[i]$

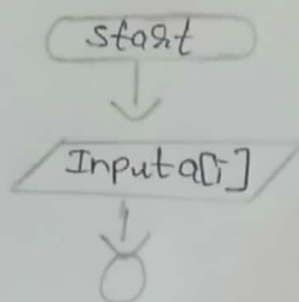
[End if]

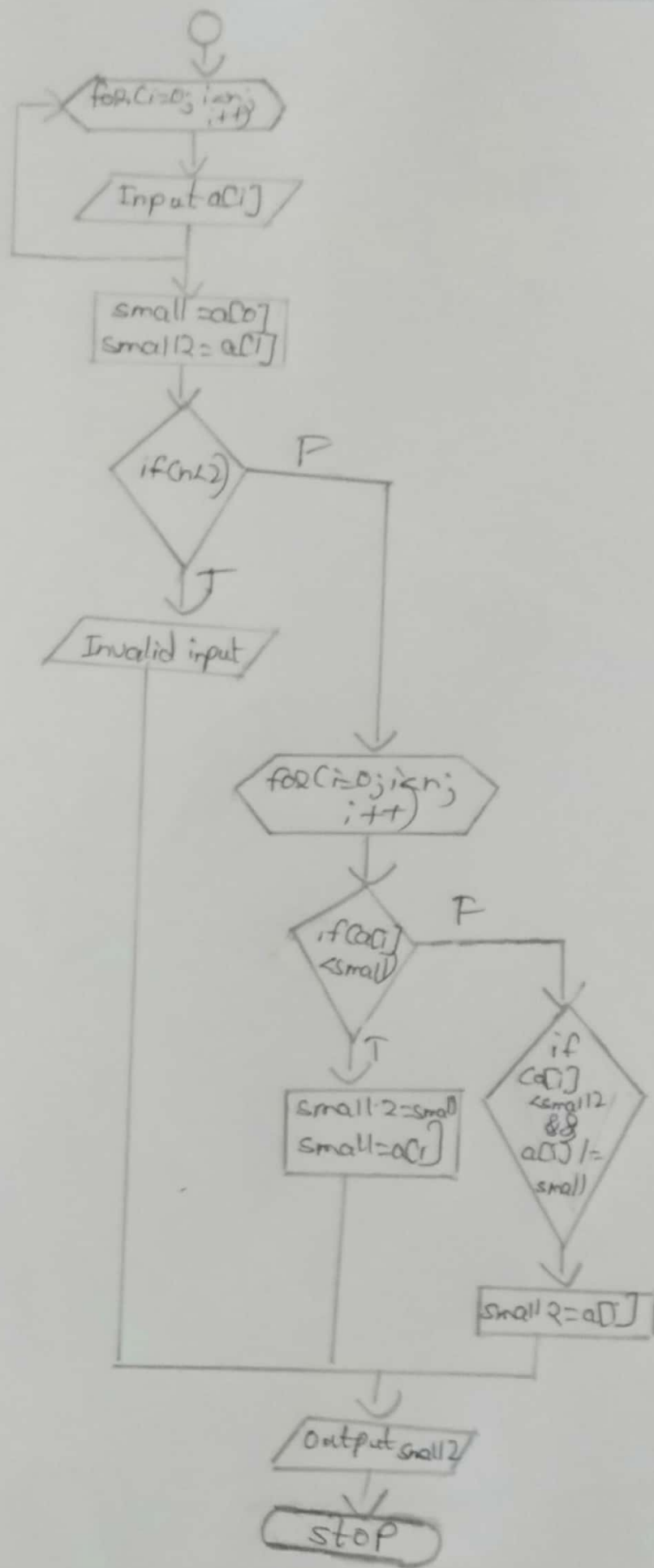
[End for]

step 8 - output $small2$

step 9 - stop

Flowchart





Output

Enter size of array

5

Enter the elements of array

12 98 24 63 50

The second smallest element in array is 24