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```c
#include<stdio.h>
int main()
{
    int a[20],small2,small,i,n;
    printf("Enter size of array\n");
    scanf("%d",&n);
    printf("%d\n",n);
    printf("Enter the elements of array\n");
    for(i=0;i<n;i++)
    {
        scanf("%d",&a[i]);
        printf("%d\t",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("\nThe second smallest element in array is %d",small2);
     return 0;
}

```

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", 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("\n The second smallest element in
                array is %d", small2);
    return 0;
}
```

Algorithm

step1 - Start

step2 - Input n

step3 - for(i=0; i<n; i++)

Input a[i]

[End for]

step4 - small = a[0]

step5 - small2 = a[1]

step6 - if (n<2)

output "Invalid input"

else [End if]

step7 - 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]

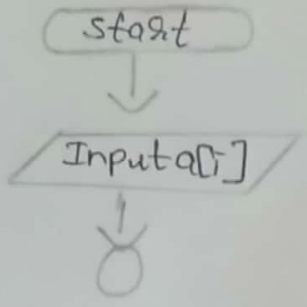
[End if]

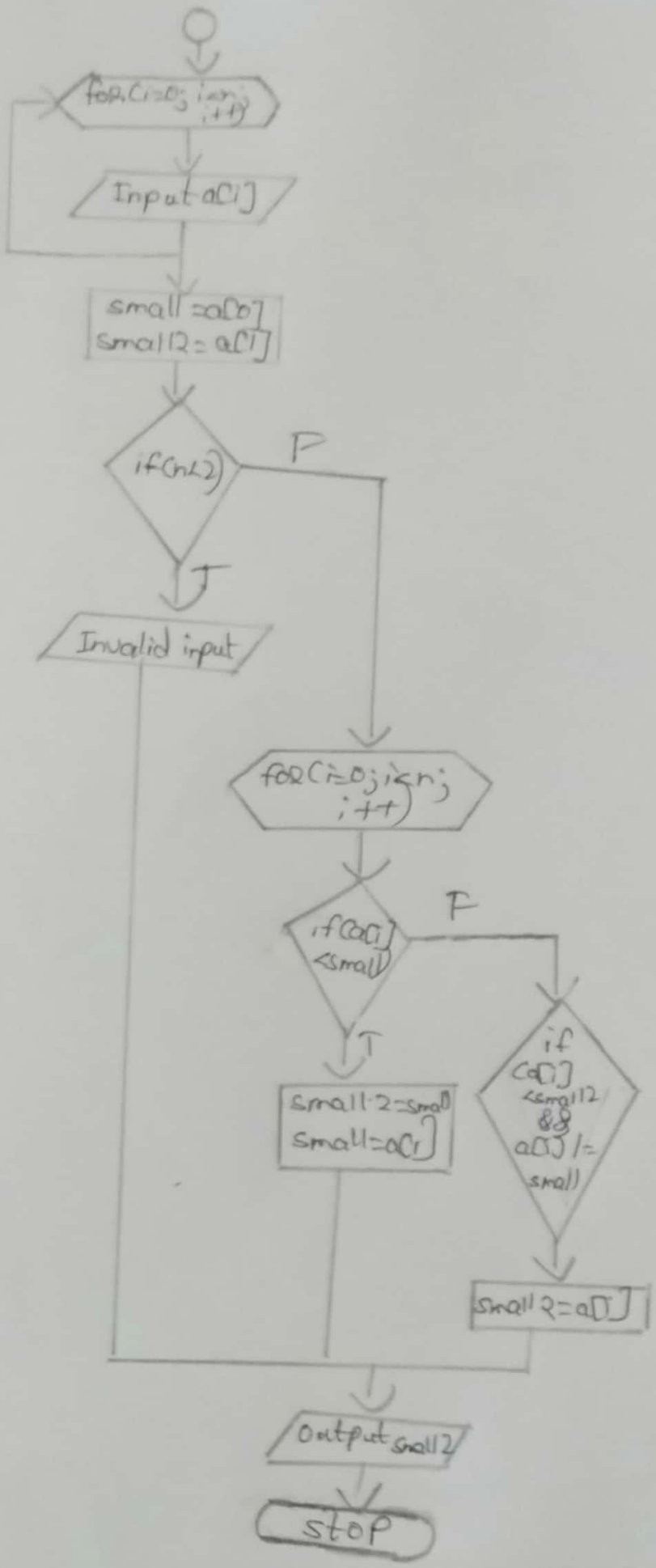
[End for]

step8 - output small2

step9 - 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
```