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Input

```
7
10
22
98
98
63
52
```

Output

```
Enter size of array
7
Enter the elements of array
10  22  98  98  63  52  52
The count of distinct elements in array is 5
```

Input

```
6
1
2
3
3
4
5
```

Output

```
Enter size of array
6
Enter the elements of array
1   2   3   3   4   5
The count of distinct elements in array is 5
```

Count of distinct elements in array

Program -

```
#include <stdio.h>
int main()
{
    int a[20], count=0, i, n, j;
    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]);
    }
    for(i=0; i<n; i++)
    {
        for(j=0; j<=i; j++)
        {
            if(a[i]==a[j])
                break;
        }
        if(i==j)
        {
            count++;
        }
    }
    printf("\n The count of distinct elements
                in array is %d", count);
}
```

Algorithm

step 1 - start

step 2 - Input n

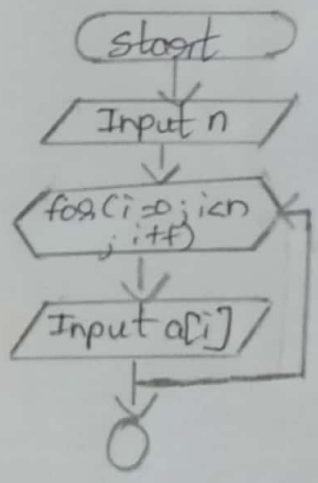
step 3 - Repeat for(i=0; i<n; i++)
Input a[i]
Output a[i]
[End for]

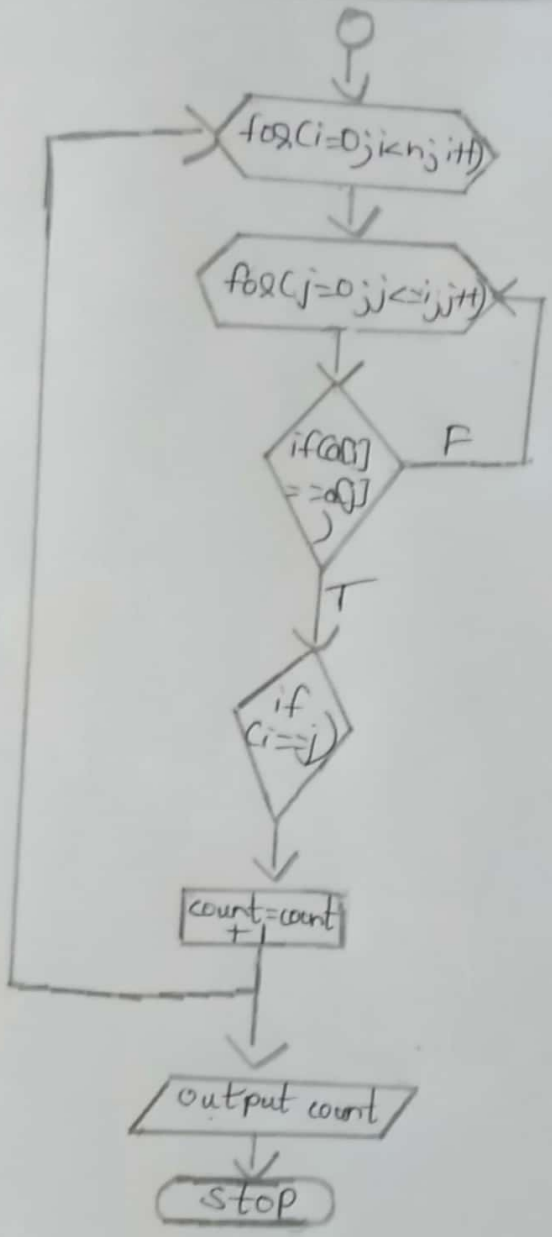
step 4 - Repeat for(i=0; i<n; i++)
Repeat for(j=0; j<=i; j++)
if(a[i] == a[j])
break
if(i == j)
count = count + 1
[End for]
[End for]

step 5 - Output count

step 6 - stop

Flowchart





Output 1

Enter size of array

6

Enter the elements of array

1 2 3 3 4 5

The count of distinct elements in array is 5

Output 2

Enter size of array

7

Enter the elements of array

10 22 98 98 63 52 52

The count of distinct elements in array is 5.