

C++14 (gcc 6.3)



Code gets autosaved every second



```
1 #include<stdio.h>
2 int main()
3 {
4     int a[20],count=0,i,j,n;
5     printf("enter the size of the array:\n");
6     scanf("%d",&n);
7     printf("%d\n",n);
8     for(i=0;i<n; i++)
9     {
10        scanf("%d",&a[i]);
11        printf("%d\n",a[i]);
12    }
13    for(i=0;i<n;i++)
14    {
15        for(j=0;j<=i;j++)
16        {
17            if(a[i]==a[j])
18                break;
19        }
20        if(i==j)
21        {
22            count++;
23        }
24    }
25    printf("\n the count of distinct element in the array is %d",count);
26 }
27
```

25.1



Open File

✓ Custom Input

Run

Custom Input

```
4
1 2 2 8 4 8
```

Status Successfully executed

Date 2020-06-07 15:12:22

Time 0 sec

Mem 15.232 kB



Input

```
4
1 2 2 8 4 8
```

Output

```
4
1
2
2
8

the count of distinct element in the array is 3
```

Write a C Program to count distinct elements in an array

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?

