

2. WAP to read a list of integers and store it in a single dimensional array. Write a C program to count and display positive, negative, odd and even numbers in an array.

```
#include <stdio.h>

int main() {
    int n, i;
    int arr[100];
    int positive = 0, negative = 0, odd = 0, even = 0;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    printf("Enter %d integers : \n", n);
    for (i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
        if (arr[i] > 0)
            positive++;
        else if (arr[i] < 0)
            negative++;
        if (arr[i] % 2 == 0)
            even++;
        else
            odd++;
    }
    printf("In Positive numbers : %d \n", positive);
    printf("Negative numbers : %d \n", negative);
    printf("Even numbers : %d \n", even);
    printf("Odd numbers : %d \n", odd);
    return 0;
}
```

C exp5countc > ...

```
2  #include <stdio.h>
3
4  int main() {
5      int n, i;
6      int arr[100]; // assuming maximum 100 elements
7      int positive = 0, negative = 0, odd = 0, even = 0;
8
9      printf("Enter number of elements: ");
10     scanf("%d", &n);
11
12     printf("Enter %d integers:\n", n);
13     for(i = 0; i < n; i++) {
14         scanf("%d", &arr[i]);
15
16         // Count positive and negative
17         if(arr[i] > 0)
18             positive++;
19         else if(arr[i] < 0)
20             negative++;
21
22         // Count odd and even
23         if(arr[i] % 2 == 0)
24             even++;
25         else
26             odd++;
27     }
28
29     printf("\nPositive numbers: %d\n", positive);
30     printf("Negative numbers: %d\n", negative);
31     printf("Even numbers: %d\n", even);
32     printf("Odd numbers: %d\n", odd);
33
34     return 0;
35 }
```



```
> cd "c:\Users\abiga\OneDrive\Desktop\Absproj\" ; if ($?) { gcc ex
```

```
p5count.c -o exp5count } ; if ($?) { .\exp5count }
```

```
Enter number of elements: 5
```

```
Enter 5 integers:
```

```
1
```

```
4
```

```
0
```

```
-9
```

```
0
```

```
Positive numbers: 2
```

```
Negative numbers: 1
```

```
Even numbers: 3
```

```
Odd numbers: 2
```

```
PS C:\Users\abiga\OneDrive\Desktop\Absproj> █
```