

Q.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, pos = 0, neg = 0, odd = 0, even = 0;
    printf ("Enter number of elements : ");
    scanf ("%d", &n);

    int arr[n];
    printf ("Enter %d integers: \n", n);
    for (i = 0, i < n; i++) {
        scanf ("%d", &arr[i]);
        if (arr[i] > 0) pos++;
        else if (arr[i] % 2 == 0) even++;
        else odd++;
    }

    {
        printf ("Positive numbers : %d /n", pos);
        printf ("Negative numbers : %d /n", neg);
        printf ("Even numbers : %d /n", even);
        printf ("Odd numbers : %d /n", odd);
    }

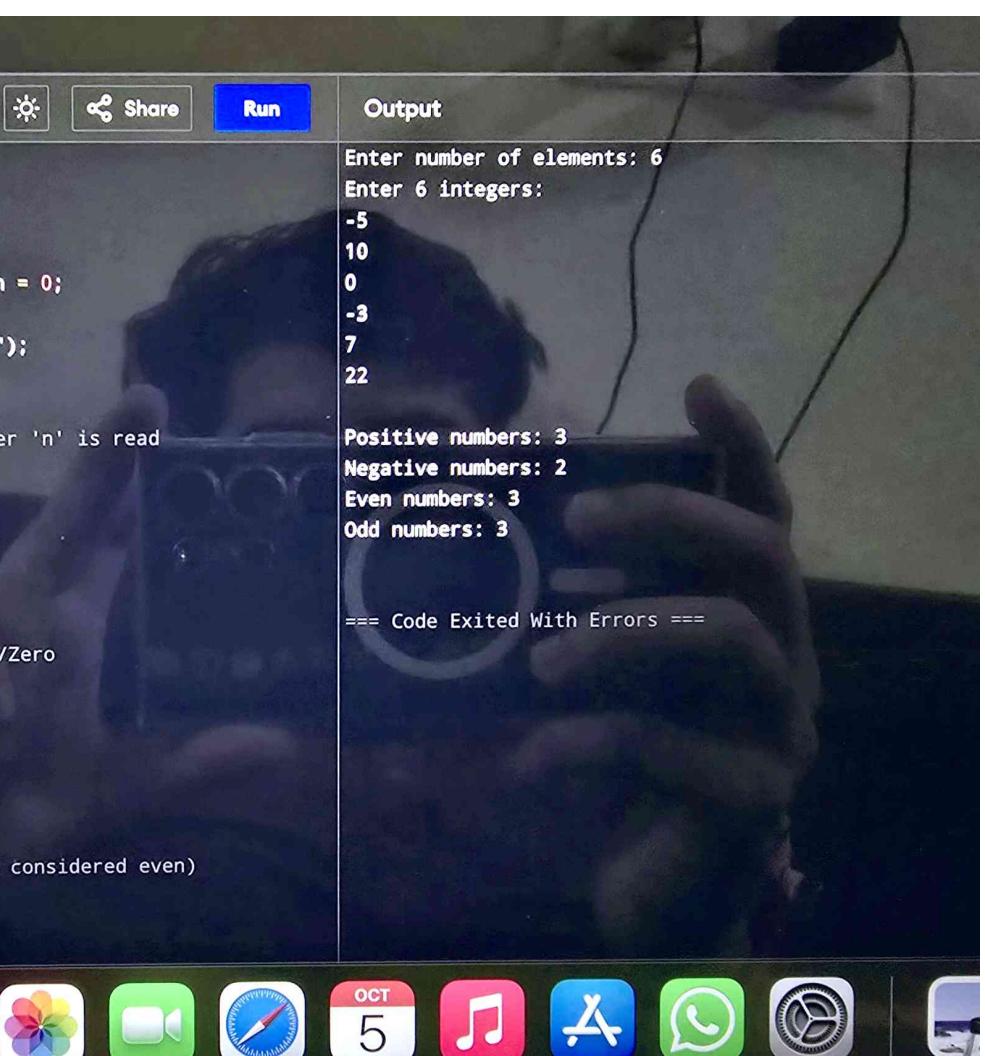
    return 0;
}

```

Remarks:

Teacher's Signature _____

Online Compiler



The image shows a person's hands holding a smartphone. The screen of the phone displays an online compiler interface. The code editor on the left contains a C program named 'main.c'. The output window on the right shows the execution results.

```
main.c
1 #include <stdio.h>
2
3 void main() {
4     int n, i;
5     int pos = 0, neg = 0, odd = 0, even = 0;
6
7     printf("Enter number of elements: ");
8     scanf("%d", &n);
9
10 // Array declaration must come after 'n' is read
11 int arr[n];
12
13 printf("Enter %d integers:\n", n);
14 for (i = 0; i < n; i++) {
15     scanf("%d", &arr[i]);
16
17     // Check for Positive/Negative/Zero
18     if (arr[i] > 0) {
19         pos++;
20     } else if (arr[i] < 0) {
21         neg++;
22     }
23
24     // Check for Even/Odd (Zero is considered even)
25     if (arr[i] % 2 == 0) {
26         even++;
27     }
28 }
```

Output:

```
Enter number of elements: 6
Enter 6 integers:
-5
10
0
-3
7
22

Positive numbers: 3
Negative numbers: 2
Even numbers: 3
Odd numbers: 3

==== Code Exited With Errors ===
```