

## EXERCISE-2

**2. Write a c program to find Odd or Even number from a give set of number.**

**Aim:** To write a program that checks whether each number in a give Set is odd or even.

**Algorithm:**

1. Start the program.
2. Input number of elements.
3. Input element into an array.
4. For each number, check if divisible by 2.
5. If yes, it's even ;else odd.
6. Display all odd and even number.
7. End the program.

**Program Code:**

```
#include <stdio.h>

int main() {
    int arr[100], n;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    printf("Enter %d elements: ", n);
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
}
```

```
printf("Even numbers: ");  
for (int i = 0; i < n; i++) {  
    if (arr[i] % 2 == 0) {  
        printf("%d ", arr[i]);  
    }  
}  
  
printf("\nOdd numbers: ");  
for (int i = 0; i < n; i++) {  
    if (arr[i] % 2 != 0) {  
        printf("%d ", arr[i]);  
    }  
}  
  
return 0;  
}
```

### Input and Output:

```
Enter number of elements: 6  
Enter 6 elements: 11 22 33 44 55 66  
Even numbers: 22 44 66  
Odd numbers: 11 33 55
```

### Result:

The program correctly identifies and displays the even and odd numbers from the given set.

