

Aim

To write a C program to check whether numbers in a given set are odd or even.

Algorithm

1. Start program.
2. Input the size of the set.
3. Input all numbers into an array.
4. For each number, check `num % 2 == 0`.
5. Print whether each number is even or odd.
6. End program.

Code

```
#include <stdio.h>

int main() {
    int n, i, num;
    printf("Enter number of elements: ");
    scanf("%d", &n);

    printf("Enter %d numbers:\n", n);
    for (i = 0; i < n; i++) {
        scanf("%d", &num);
        if (num % 2 == 0)
            printf("%d is Even\n", num);
        else
            printf("%d is Odd\n", num);
    }
    return 0;
}
```

Sample Output

```
Enter size of sorted array: 4
Enter sorted elements:
4 5 6 9
Enter element to search: 5
Element found at position 2

=== Code Execution Successful ===
```

Result

The program identifies whether numbers are odd or even.