

## PRACTICAL NO:-5

- Aim: Odd/Even check using if-else, Max of three numbers (nested if), Ternary operator, Switch-case
  - 1. If-Else Statement :-
    - The if-else statement is used for conditional checking.
    - It allows the program to execute one block when the condition is true and another when it is false.

Example use-case: checking whether a number is odd or even.

- 2. Nested If :-
  - Nested if-else statements allow comparing multiple values.
  - This structure is commonly used when determining the maximum among several numbers.
- 3. Ternary Operator ( ?: )
  - It is a shorthand form of an if-else decision.
  - It evaluates a condition and returns one of the two values.
  - Format: condition ? value\_if\_true : value\_if\_false;
- 4. Switch-Case Statement
  - The switch-case statement is used to choose one action from multiple options based on the value of a variable.

## ● CODE :-

The screenshot shows a code editor interface with a dark theme. The title bar says "Welcome" and "C Abhishek.c". The main area contains the following C code:

```
1 #include <stdio.h>
2
3 int main() {
4
5     // 1. Odd/Even check using if-else
6     int num;
7     printf("Enter a number to check Odd/Even: ");
8     scanf("%d", &num);
9
10    if (num % 2 == 0) {
11        printf("%d is Even.\n", num);
12    } else {
13        printf("%d is Odd.\n", num);
14    }
15
16    // 2. Maximum of three numbers (nested if)
17    int a, b, c, max;
18    printf("\nEnter three numbers: ");
19    scanf("%d %d %d", &a, &b, &c);
20
21    if (a >= b && a >= c) {
22        max = a;
23    } else if (b >= a && b >= c) {
24        max = b;
25    } else {
26        max = c;
27    }
28
29    printf("Maximum of %d, %d, and %d is: %d\n", a, b, c, max);
30
31    // 3. Ternary operator
32    int n;
33    printf("\nEnter a number to check positive/non-positive: ");
34    scanf("%d", &n);
35
36    char* result = (n > 0) ? "Positive" : "Non-Positive";
37    printf("The number %d is %s.\n", n, result);
38
39    // 4. Switch-case
40    int choice;
41    printf("\nChoose an option (1-3):\n");
42    printf("1. Print 'Hello'\n");
43    printf("2. Print 'World'\n");
44    printf("3. Print 'C Programming'\n");
45    printf("Enter your choice: ");
46    scanf("%d", &choice);
47
48    switch (choice) {
49        case 1:
50            printf("Hello\n");
51            break;
52
53        case 2:
54            printf("World\n");
55            break;
56
57        case 3:
58            printf("C Programming\n");
59            break;
60
61        default:
62            printf("Invalid choice\n");
63    }
64
65    return 0;
66 }
```

## • OUTPUT :-

PRO Focus folder in explorer (ctrl + click) TERMINAL PORTS

PS C:\Users\Abhishek\OneDrive\Desktop\Assignment C Programming> cd "c:\Users\Abhishek\OneDrive\Desktop\Assignment C Programming\" ; if (\$?) { gcc Abhishek.c -o Abhishek } ; if (\$?) { .\Abhishek }

Enter a number to check Odd/Even: 10  
10 is Even.

Enter three numbers: 4 9 6  
Maximum of 4, 9, and 6 is: 9

Enter a number to check positive/non-positive: 3  
The number 3 is Positive.

Choose an option (1-3):  
1. Print 'Hello'  
2. Print 'World'  
3. Print 'C Programming'  
Enter your choice: 1

## **Conclusion :-**

- This experiment demonstrates the use of:
  - If-Else for odd/even checking
  - Nested If for finding the maximum among three numbers
  - Ternary Operator for concise decision-making
  - Switch-Case for selecting actions based on user input