

Lab Exercise scheduled on 24/05/2025(ESC201.1)

1. Perform Addition

```
#include <stdio.h>

int main() {
    int num1, num2, sum;
    printf("Enter two numbers: ");
    scanf("%d %d", &num1, &num2);
    sum=num1+num2;
    printf("Sum: %d\n", sum);
}
```

2. Evaluate Arithmetic Expression $((a + b / c * d - e) * (f - g))$

```
#include<stdio.h>

int main()
{
    float a, b, c, d, e, f, g, result;
    printf("Enter values for a, b, c, d, e, f, g: ");
    scanf("%f %f %f %f %f %f %f", &a, &b, &c, &d, &e, &f, &g);
    result = ((a + b / c * d - e) * (f - g));
    printf("Result: %.2f\n", result); return 0; }
```

3. Find the Sum of Individual Digits of a 3-Digit Number

```
#include <stdio.h>

int main() {
    int num, sum = 0;
    printf("Enter a 3-digit number: ");
    scanf("%d", &num);
    sum += num % 10; // Extract last digit
    num /= 10;
    sum += num % 10; // Extract middle digit
    num /= 10;
    sum += num;      // Extract first digit
    printf("Sum of digits: %d\n", sum);
    return 0;
}
```

4. Evaluate Expressions $(x + y) / (x - y)$ and $(x + y) * (x - y)$

```
#include

int main()
```

```

{
float x, y;
printf("Enter values for x and y: ");
scanf("%f %f", &x, &y);
printf("Expression 1: %.2f\n", (x + y) / (x - y));
printf("Expression 2: %.2f\n", (x + y) * (x - y)); return 0; }

```

5. Check Whether a Number is Even or Odd

```

#include <stdio.h>
int main()
{
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num % 2 == 0)
        { printf("%d is even.\n");
        }
    else
        { printf("%d is odd.\n");
        }
}

```

6. Check Whether a Number is Even or Odd Using Ternary Operator

```

#include <stdio.h>
int main() {
    int num;
    printf("Enter an integer: ");
    scanf("%d", &num);
    (num % 2 == 0) ? printf("%d is even.\n", num) : printf("%d is odd.\n", num);
    return 0;
}

```

7. Pre-Increment (++x)

The value of x is incremented first, then used in the expression.

```

#include <stdio.h>
int main()
{
    int x = 5;
    int y = ++x; // x is incremented to 6, then assigned to y
    printf("x = %d, y = %d\n", x, y); // Output: x = 6, y = 6Example:
}

```

8. Post-Increment (x++)

The value of x is used first, then incremented.

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int x = 5;
```

```
int y = x++; // x is assigned to y first, then incremented
```

```
printf("x = %d, y = %d\n", x, y); // Output: x = 6, y = 5
```

```
}
```