**Class: B. Tech. 2nd Semester Branch: Computer Science and Engineering**

**Course Title: Computer Programming Course Code: ESC-201**

**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);

}

1. **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; }

1. **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;

}

1. **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; }

1. **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");

}

}

1. **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;

}

1. **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:

}

1. **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

}