

Experiment No-02: Basic Arithmetic and Conditional Operator in C.

Objectives

- Introduce with the arithmetic and conditional operator in C.
- Solve problems by applying the learned concept.

Example 1: A C program to calculate the perimeter and area of a triangle.

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

void main()
{

    int a,b,c, p, s;
    float area;

    printf("Enter three sides of Triangle:\n");
    scanf("%d%d%d",&a,&b,&c);

    p = a+b+c; // perimeter
    s = (a+b+c)/2;
    area = sqrt(s*(s-a)*(s-b)*(s-c));

    printf("Perimeter = %d\nArea = %f\n",p,area);

}
```

Example 2: A C program to find the maximum between two numbers using *conditional operator*.

```
#include<stdio.h>

void main()
{

    int a, b, max;

    printf("Enter Two numbers:\n");
    scanf("%d%d",&a,&b);

    max = (a>b)?(printf("Max = %d",a)): (printf("Max = %d",b));

}
```

*** Please use your reference book of C programming for better understanding the basic syntax of each conditional statements and also include them in your lab report. ***

Practice Exercise

1. Write a C program to enter length and breadth of a rectangle and find its area and perimeter.
2. Write a C program to enter radius of a circle and find its diameter, circumference and area.
3. Write a C program to enter length in centimeter and convert it into meter and kilometer.
4. Write a C program to enter temperature in °Celsius and convert it into °Fahrenheit.
5. Write a C program to convert days into years, months, weeks and days.
6. Write a C program to find maximum between three numbers using conditional/ternary operator.
7. Write a C program to check whether a number is even or odd using conditional/ternary operator.
8. Write a C program to check whether year is leap year or not using conditional/ternary operator.

Resources (Link)

[\[C Operators\]](#) [\[Conditional Operator in C\]](#) [\[Intro to C++\]](#)