

Basic Programming Lab

— — 0x03

Ternary Operator

Syntax: **variable = exp1 ? exp2 : exp3;**

// Program to find Largest number between 2 nos.

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

```
int main()
```

```
{
```

```
    int Number_1 = 10;
```

```
    int Number_2 = 20;
```

```
    char Result;
```

```
    Result = (Number_1 > Number_2)? 'Y':'N';
```

```
    printf("Result: %c", Result);
```

```
    return 0;
```

```
}
```

C Relational Operators

Operator	Meaning of Operator
>	Greater than
<	Less than
>=	Greater than or Equal to
<=	Less than or Equal to
!=	Not Equal to
==	Equal to

Square Root of a No

```
// Library File: math.h
// Program to find square root of a no

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

int main()
{
    int Number_1 = 9, Result;
    Result = sqrt(Number_1);
    printf("Result: %d", Result);

    return 0;
}
```

Assignment

//0x03

*//Use **scanf** for input in Every Program*

1. Write a program to find whether the number is **odd or even** using **ternary operator**.

2. Write a program to check whether the two **character inputs** are equal or not using **ternary operator**.

Input1 = A, Input2 = a, Output = Not Equal

3. Write a program to add two times. (Time Format = hh:mm:ss)

Example: 06:07:08 & 04:05:06 = 10:12:14

4. Write a program to print the next character. Take 3 character input. (Use Unary Operator)

Input : Char_1 = A, Char_2 = B, Char_3 = C

Output: Char_1 = B, Char_2 = C, Char_3 = D

5. Prestigious Bank of India needs your help to create a software. They need a software to calculate the total money deposited by customer which can be 500/200/100/50/20/10 banknotes.

Input:

How many 500 Note: 2

How many 200 Note: 3

How many 100 Note: 4

How many 50 Note: 5

How many 20 Note: 6

How many 10 Note: 7

Output:

Total Money : Rs 2440

6. A good friend of mine from Mathematics Department asked for my help and I cannot turn down her request. She needs a program to find the length of a straight line formed by two end points. Write a program for that and Co-ordinates would be given as inputs. (Use sqrt function from math.h)

Input : X1 = 1, Y1 = 2, X2 = 3, Y2 = 4

Output: Length = 2.828427

Points to Remember

1. Filetype: `.c`
2. Naming Convention for Directory: `Assignment_X`
where X = Lab No
example: `Assignment_1`
3. Naming Convention for File: `RollNo_Q_Y.c`
where Y = Question No in that Assignment
example: `123XXX4567_Q_1.c`

Commands:

	Command	Example
Create Directory	<code>mkdir <directory_name></code>	<code>mkdir test_directory</code>
Create File	<code>vi <filename></code>	<code>vi test.c</code>
Compile a C Program	<code>gcc <filename></code>	<code>gcc test.c</code>
Run a C Program	<code>./a.out</code>	

4. Write your details in every program

```
/*
```

```
-----  
| Author : Your_Name  
| Roll No: Your_Roll_No  
| Department: Your_Department  
|-----
```

```
*/
```