# **Lab Manual 04**

## **Conditional STATEMENTS (if-else)**

**Lab Objectives:**

At the end of this lab students will know about

* **What is the purpose of conditional statements?**
* **How to use if else in C++ programs**

**The if statement**

The if statement can be used to test conditions so that we can alter the flow of a program. In other words: if a specific statement is true, execute some instructions. If not true, execute these instructions**.**

In the following example the user can input a number. The number is stored in the variable A. Now take a look at the “if statement”: if the number stored in the variable A is equal to ten, then “is equal” is printed on the screen. Simple, isn’t it. If the number is not equal to ten, then nothing is printed.

**Take a look at the example:**

#include <iostream>

using namespace std;

int main()

{

int a;

cout<< “enter number=”;

cin>> a;

if(a==10)

cout<< “a is equal to 10”;

return 0;

}

Now we like to also print something if the “if statement” is not equal. We could do this by adding another “if statement” but there is an easier / better way. Which is using the so called **“else statement”** with the “if statement”.

#include<iostream>

using namespace std;

int main()

{

int a;

cin >> a;

if ( a == 10 )

{

cout << " a is equal to 10" << '\n';

cout << "closing program" << '\n';

}

else

{

cout << " a is not equal to 10" << '\n';

cout << "closing program" << '\n';

}

return 0;

}

**Question #01**

**Write a C++ program that tells the user that the number entered is less than or greater than 10?**

**Question #02**

**Write a C++ program that tells the user that the number entered is even or odd?**

**Question #03**

**Write a menu driven C++ program that ask the user to choose the type in which he wants the output?**

**Either he wants to convert the entered Celsius temperature in to** **Fahrenheit or Kelvin?**

**Question #04**

**Write a program to compare following strings with each other and display which string is smaller.**

**string str1 = "Hello";**

**string str2 = "Hi";**

**string str3 = "Air";**

**string str4 = "Bill";**

**string str5 = "Big";**

**Question #05**

**According to your grading system mark the user entered numbers as Grade A, B, C, D, F?**

**Question # 06**

**Write a program to implement all conditions of lecture # 7 (Slide:19 & 20) and display results.**

**Variables are given below.**

****