Course Name: Computer Engineering workshop (CEN 1006)		
LAB # 11: Introduction to Basic Circuit Designing		
Department	**Registration Number/Name**	**Semester/Section**
BS CEN	F24604018/Muhammad Hamzah Iqbal	1
Date	**Instructor's Name**	**Instructor's Signature**
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Objective:

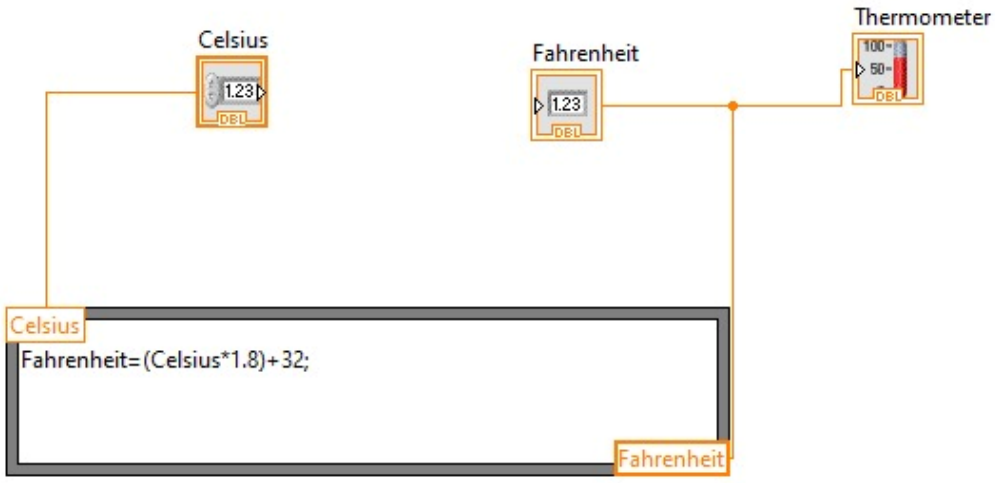
- To get familiar with LabVIEW.

Lab Task:

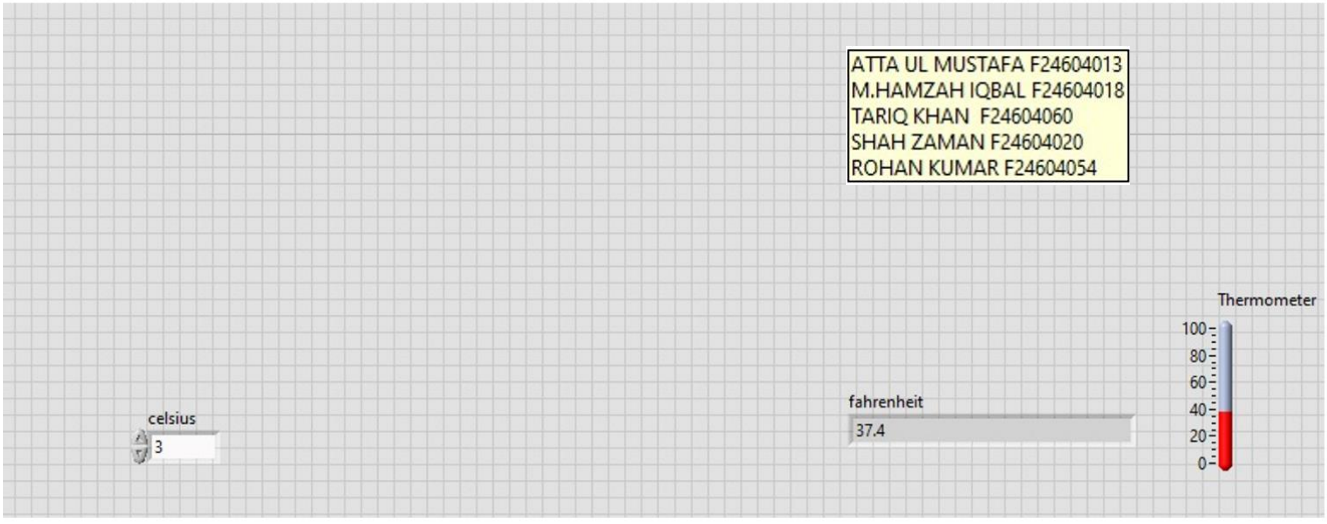
- Create a VI to convert the given temperature in degree Celsius to degree Fahrenheit [Given: (°C x1.8) + 32 = °F].

FRONT PANEL

ATTA UL MUSTAFA F24604013
M.HAMZAH IQBAL F24604018
TARIQ KHAN F24604060
SHAH ZAMAN F24604020
ROHAN KUMAR F24604054



BLOCK DIAGRAM



How This VI Works:

This LabVIEW Front Panel converts a temperature value from Celsius to Fahrenheit using the following process:

1. Input (Celsius Control):
   The user enters a temperature in Celsius using the numeric control and presses **CTRL AND R.**
2. Formula Calculation (In Block Diagram):
   The conversion is performed using the formula:

   $$F=(C\times1.8)+32$$

   Here, "C" is the Celsius value, and "F" is the resulting Fahrenheit value.
3. Output (Fahrenheit Indicator):
   The converted Fahrenheit value is displayed in the numeric indicator.
4. Thermometer Visualization:
   The thermometer indicator visually represents the Fahrenheit value, providing an intuitive display of the temperature.

Conclusion:

This LabVIEW VI converts temperature from **Celsius** to **Fahrenheit** using the formula:
F = (C × 1.8) + 32.

We started by adding a **Celsius input** (Numeric Control) and a **Fahrenheit output** (Numeric Indicator) on the Front Panel. A **Formula Node** was used in the Block Diagram to perform the conversion. The output was also connected to a **Thermometer** for a visual display.After wiring all components correctly, the VI was tested with sample values 15 degrees , providing accurate results. This simple program demonstrates LabVIEW's ability to combine calculations with visual outputs for user-friendly applications.