

Laboratory Session

Practical Exercises – 100% Online (No Installation Required)

Dear students,

Today you will work entirely through your browser.

We will use the best free online C compiler currently available:

👉 [https://www.onlinegdb.com/online c compiler](https://www.onlinegdb.com/online_c_compiler)

Alternative (very good as well):

https://www.w3schools.com/c/tryit.php?filename=demo_helloworld

Lab Exercises

Complete them **one by one** in OnlineGDB.

(When you finish an exercise, click **Save**, then copy the link or download the .c file and submit it.)

1. Warm-up

Write and run the classic “Hello World” program exactly as shown in the lecture.

2. Personal Introduction

Make your program print:

*** Student Information ***

Name: Your Full Name

ID: 2025XXXXXX

Course: Introduction to C

3. Two-line Welcome (with tabs)

Your program must output exactly:

Language: C

Year: 2025-2026

4. Age Calculator

Ask the user: **“What year were you born?”**

Then print: **“In 2025 you are/will be X years old.”**

5. Simple Calculator

Ask the user for two integers a and b, then print:

$a + b = ?$

$a - b = ?$

$a * b = ?$

$a / b = ?$ (integer division)

$a \% b = ?$ (remainder)

6. Temperature Converter

Convert in both directions:

- Ask for temperature in Celsius → print Fahrenheit
- Then ask for Fahrenheit → print Celsius

Use the formulas:

$$F = C \times 1.8 + 32$$

$$C = (F - 32) \times 0.5556 \text{ (or } 5.0/9.0)$$

7. BMI Calculator (Full Version)

Ask the user for weight (kg) and height (m), compute BMI, then print the value (1 decimal) and category:

BMI < 18.5 → Underweight

$18.5 \leq \text{BMI} < 25$ → Normal weight

$25 \leq \text{BMI} < 30$ → Overweight

BMI ≥ 30 → Obese

8. Bonus – Exact Box (Type it yourself!)

Print the following shape using only printf and escape sequences:

```
+-----+
|           |
|  Welcome to C  |
|           |
+-----+
```