

## C++



Lecturer: Dr. Ghada NourEldeen, Dr. Dieaa I. Nassr

# Sheet 2

# Objectives:

Student should be Know about:

- assignment statements and mathematical expressions
- Simple definition about if Condition

# ♣Problem 1 Simple Interest Calculation:

In finance, calculating the interest on a loan or investment is a common problem. Here's how you can use assignment statements to compute simple interest:

#### Formula:

- Simple Interest (SI) = (P \* R \* T) / 100
- · Where:
- P = Principal amount
- R = Rate of interest per year
- T = Time in years

## ♣Problem 2:

In this program, we calculate the average marks of a student from three subjects and determine if the student has passed.

#### Formula:

Average = (Subject1 + Subject2 + Subject3) / 3



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# ♣Problem 3:

This program calculates the discount on a shopping bill based on the total amount spent.

### Discount Rules

- If the total bill is more than \$1000, a 10% discount is applied.
- If the total bill is between \$500 and \$1000, a 5% discount is applied.