

LAB NO: 2

Date:

SIMPLE C++ PROGRAMS

Objectives:

In this lab, student will be able to:

1. Write C++ programs.
2. Compile and execute C++ programs.
3. Debug and trace the programs.

Lab exercises

Simple C++ programs

Write C++ programs to do the following:

1. Input P, N and R to compute simple and compound interest.
[Hint: $SI = PNR/100$, $CI = P(1+R/100)^N - P$]
2. Input radius to find the volume and surface area of a sphere.
[Hint: $volume = (4\pi r^3)/3$, $Area = 4\pi r^2$]
3. Convert the given temperature in Fahrenheit to Centigrade. [Hint: $C = 5/9(F-32)$]
4. Find the sum, difference, product and quotient of 2 numbers.

Additional exercises

1. Convert the time in seconds to hours, minutes and seconds. [Hint: $1 \text{ hr} = 3600 \text{ sec}$]
2. Determine how much money (in rupees) is in a piggy bank that contains denominations of 20, 10 and 5 rupee along with 50 paisa coins. Use the following values to test the program: 13 twenty rupee notes, 11 ten rupee notes, 7 five rupee coins and 13 fifty paisa coins. [Hint: answer is Rs.411.5]