Kantipur Engineering College

Dhapakhel, Lalitpur

Subject: Object-Oriented Programming

Lab-4

Title:

Constructors and Destructors

Objective:

- To be familiar with how to create different types of constructors.
- To be familiar with the concept of destructors and their need in C++ programming.

Theory:
- Constructors
- Default constructors
- Parameterized constructors
- Copy Constructors
- Initialization list
- Destructors

Lab exercises

1. Create a class 'time' with data member's hour, minute, second, and day. Initialize all the data members using a constructor. Write a program to add two time objects using necessary member functions and display the result.

2. Write a program to calculate the perimeter of the Triangle using default and parameterized constructors.

3. Create a class called Volume that uses three Variables (length, width, height) of type distance (feet and inches) to model the volume of a room. Read the three dimensions of the room and calculate the volume it represents, and print out the result. The volume should be in (feet3) form i.e. you will have to convert each dimension (feet and inch) into the feet form i.e. the length 12 feet 6 inches will be 12.5 ft.