Kantipur Engineering College

Dhapakhel, Lalitpur

Subject: Object-Oriented Programming

Lab-7

Title:

Type Conversions

Objective:

- To be familiar with type conversion

Theory:

Introduction to type conversion
- Basic to class type
- Class to basic type
- Class to class type

With their example and syntax

Lab exercises

1. Make a class called memory with member data to represent bytes, kilobytes and megabytes. Read the value of memory in bytes from the user as basic types and display the result in user-defined memory type. [Hint: 1 Kilobyte = 1024 bytes, 1 megabyte = 1024 Kilobytes].

2. Write a program to read the height of a person in feet and inches and convert it into centimeters by using the suitable type conversion method.
   [Hint: 1 feet = 30.48 cm, 1 inch = 2.54 cm]

3. Write a program to convert Rectangle coordinates to Polar coordinates by using:
   a. conversion routine in the source class
   b. conversion routine in destination class

   (Hint: polar coordinates (radius, angle) and rectangular coordinates (x,y) where r = sqrt(x^2 + y^2) and angle = tan^-1(y/x))

4. Write a program to convert degree Celsius to degree Fahrenheit using class-to- class type conversion.