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Subject: Object Oriented Programming in C++

Lab-10

Title: Type conversion

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 (please code yourself and show the output to instructor)

1. Write a program to read height of person in meter and convert into feet and inches by using suitable type conversion method.
2. Write a program to read height of person in feet and inches and convert into meter by using suitable type conversion method.
3. 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. Like for m (basic type) = 108766, your program should display as: 1 megabyte 38 kilobytes 177 bytes. [Hint: Use basic to user defined (basic-to-class) conversion method].
4. Write a program to convert total memory in bytes into mb, kb and bytes using type conversion. (1kb=1024bytes,1mb=1024kb)
5. Write a complete program to convert the polar coordinates into rectangular coordinates.(hint: polar-coordinates(radius, angle) and rectangular co-ordinates (x,y) where x=r*cos(angle) and y=r*sin(angle))
6. Write a program to convert Rectangle coordinate to Polar coordinate by using:
   - conversion routine in source class
   - conversion routine in destination class
7. Write a program to convert class Polar to Rectangle and vice versa by using type conversion.
8. Write a program to convert degree Celsius to degree Fahrenheit by using class to class type conversion.

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