

CS 12 - Lab 5 Classes

Write a class called *convert_to_metric* containing two private data members and two public member functions. The data members should include an integer called *feet* and a float called *inches*. The member functions should include a function called *length* and a function called *convert_and_display* described below.

length This function should take two arguments, *feet_part* and *inch_part*, which store values into the members *feet* and *inches*. If the *inch_part* value is greater than or equal to 12, the function should convert it to feet and inches and store the converted values. For example, the function call

```
length(8, 16.3);
```

should result in a value of 9 being stored in *feet* and a value of 4.3 being stored in *inches*.

convert_and_display This function should compute the distance in centimeters and display the result on the screen. You should use the following formula:

```
distance_in_cm = (12 * feet + inches) * 2.54
```

Write a short main program that declares an object of type *convert_to_metric* and shows how the class and its member functions work. You must use Unix to do this lab.