

C++ Meters to Feet

Pseudocode

1. Write pseudocode for the exercise

Here's What I Want You to Do

Create a C++ console program that takes user input for meters and converts to feet.

A good way to develop a program is to build it piece by piece. Agile development is about creating working programs with each iteration or sprint.

A sprint is a short, time-boxed period when a scrum team works to complete a set amount of work.

These are the two version we will build in this assignment.

1. Hard coded value to test algorithm
2. Get input from user

Here's Why I Want You to Do It

Demonstrate understanding of:

Calculations, Variables, Constants, Input from user

Assignment 1: Hard Coded

Write a C++ program named **meters_to_feet.cpp** that converts meters to feet.

- Use named constants. No magic numbers.
- Hard code the meters to be converted.
- Display the value in feet.

1 foot = 3.2808399 meters

TODO

You can copy and paste the follow TODO outline to get started with this program.

```
/**
 * Filename: meters_to_feet.cpp
 * Written by:
 * Written on:
 * Revised:
 * Convert meters to feet
 */

#include <iostream>

int main()
{
    // TODO: Constant for meters to feet conversion factor

    // TODO: Hardcoded meters input variable

    // TODO: Create output variable

    // TODO: Multiply meters by conversion factor

    // Display output

    return 0;
}
```

Example run:

```
12 Meters is: 39.3701 feet.
```

Assignment 2 - User Input

Write an interactive version that accepts a meter value from a user and converts it to feet.

Save the program as **meters_to_feet_interactive.cpp**

Example run:

```
Please enter meters: 15
15 Meters is: 49.2126 feet.
```

Assignment Submission

Attach the following to the assignment in Blackboard.

1. Attach the pseudocode.
2. Attach the program files.
3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.