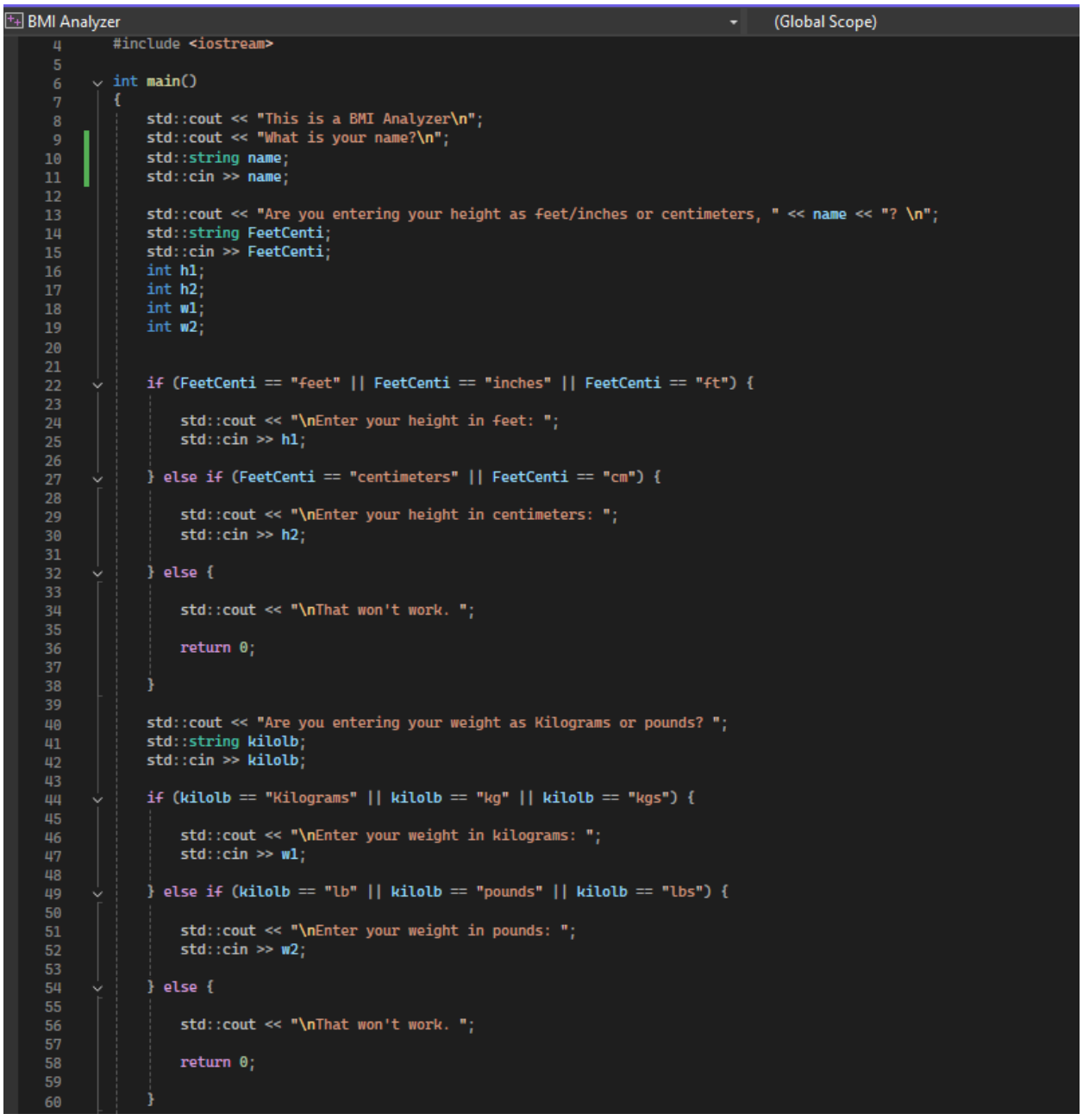
BodyMassIndex #1

The Goal of this program is:

- Take the Users name, height, and weight
- Calculates the Users Body Mass Index (BMI), and tells the User whether they are underweight, normal weight, overweight, obese, or extremely obese..




```cpp
#include <iostream>

int main()
{
    std::cout << "This is a BMI Analyzer\n";
    std::cout << "What is your name?\n";
    std::string name;
    std::cin >> name;

    std::cout << "Are you entering your height as feet/inches or centimeters, " << name << "? \n";
    std::string FeetCenti;
    std::cin >> FeetCenti;
    int h1;
    int h2;
    int w1;
    int w2;


    if (FeetCenti == "feet" || FeetCenti == "inches" || FeetCenti == "ft") {

        std::cout << "\nEnter your height in feet: ";
        std::cin >> h1;

    } else if (FeetCenti == "centimeters" || FeetCenti == "cm") {

        std::cout << "\nEnter your height in centimeters: ";
        std::cin >> h2;

    } else {

        std::cout << "\nThat won't work. ";

        return 0;

    }

    std::cout << "Are you entering your weight as Kilograms or pounds? ";
    std::string kilolb;
    std::cin >> kilolb;

    if (kilolb == "Kilograms" || kilolb == "kg" || kilolb == "kgs") {

        std::cout << "\nEnter your weight in kilograms: ";
        std::cin >> w1;

    } else if (kilolb == "lb" || kilolb == "pounds" || kilolb == "lbs") {

        std::cout << "\nEnter your weight in pounds: ";
        std::cin >> w2;

    } else {

        std::cout << "\nThat won't work. ";

        return 0;

    }
```

I got this so far, on my own but now I am trying to figure out how to make it so the User can put in their exact height (to remove variances of 5 ft 10 or 5 feet 10

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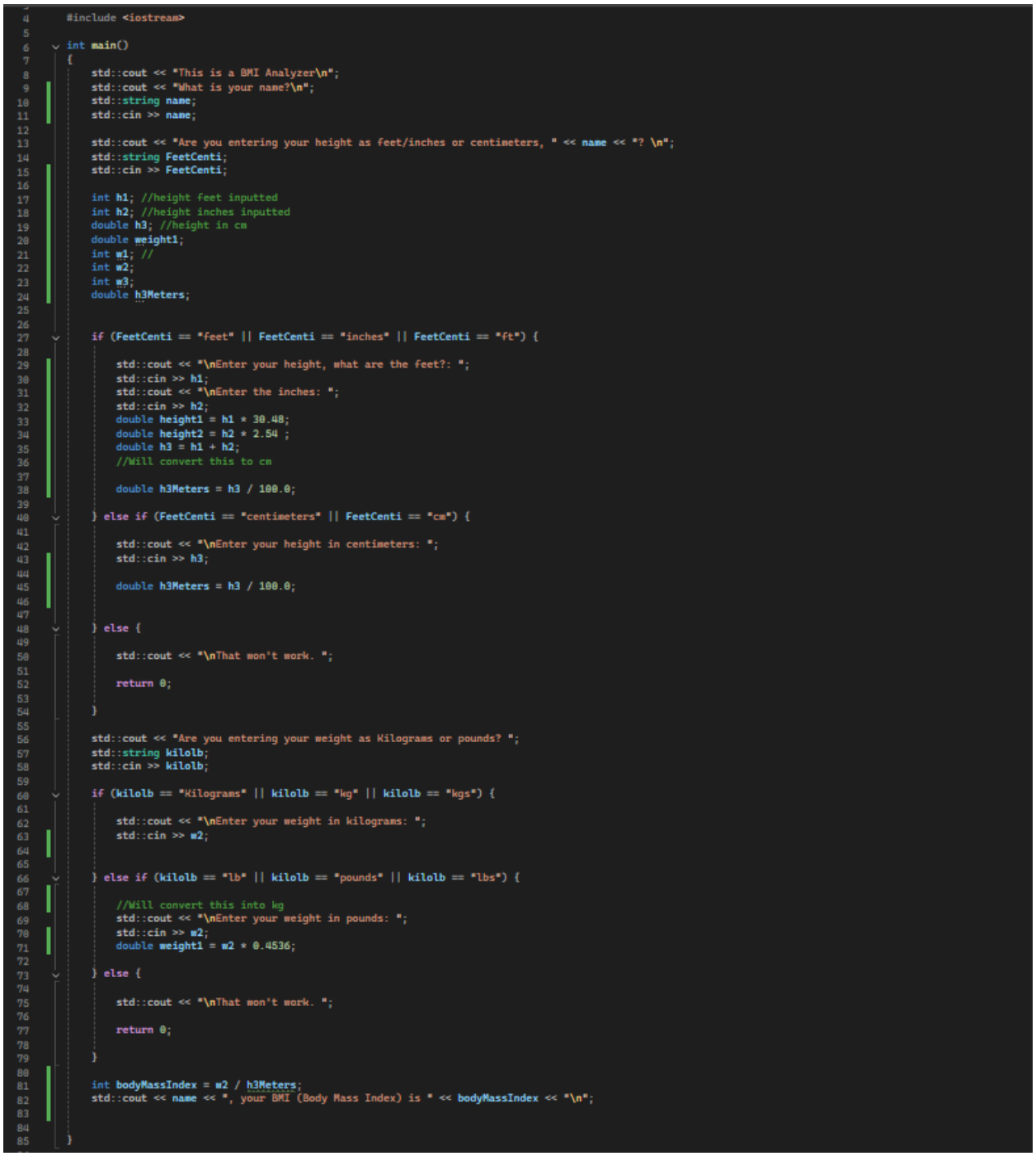
inches, 5’10 etc). I changed the prompt and asked for the **feet** and **inches** separately so they are two different inputs. Next I did everything else there and I thought about doing a ft/inches into cm converter so the math can be done easier.



```cpp
#include <iostream>

int main()
{
    std::cout << "This is a BMI Analyzer\n";
    std::cout << "What is your name?\n";
    std::string name;
    std::cin >> name;

    std::cout << "Are you entering your height as feet/inches or centimeters, " << name << "? \n";
    std::string FeetCenti;
    std::cin >> FeetCenti;

    int h1; //height feet inputted
    int h2; //height inches inputted
    double h3; //height in cm
    double weight1;
    int w1; //
    int w2;
    int w3;
    double h3Meters;


    if (FeetCenti == "feet" || FeetCenti == "inches" || FeetCenti == "ft") {

        std::cout << "\nEnter your height, what are the feet?: ";
        std::cin >> h1;
        std::cout << "\nEnter the inches: ";
        std::cin >> h2;
        double height1 = h1 * 30.48;
        double height2 = h2 * 2.54 ;
        double h3 = h1 + h2;
        //Will convert this to cm

        double h3Meters = h3 / 100.0;

    } else if (FeetCenti == "centimeters" || FeetCenti == "cm") {

        std::cout << "\nEnter your height in centimeters: ";
        std::cin >> h3;

        double h3Meters = h3 / 100.0;


    } else {

        std::cout << "\nThat won't work. ";

        return 0;

    }

    std::cout << "Are you entering your weight as Kilograms or pounds? ";
    std::string kilolb;
    std::cin >> kilolb;

    if (kilolb == "Kilograms" || kilolb == "kg" || kilolb == "kgs") {

        std::cout << "\nEnter your weight in kilograms: ";
        std::cin >> w2;


    } else if (kilolb == "lb" || kilolb == "pounds" || kilolb == "lbs") {

        //Will convert this into kg
        std::cout << "\nEnter your weight in pounds: ";
        std::cin >> w2;
        double weight1 = w2 * 0.4536;

    } else {

        std::cout << "\nThat won't work. ";

        return 0;

    }

    int bodyMassIndex = w2 / h3Meters;
    std::cout << name << ", your BMI (Body Mass Index) is " << bodyMassIndex << "\n";


}
```

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I now am here, and have to clean up my work a bit. I had to add and change things so I have some data types that are not initialized or set to anything.


```cpp
#include <iostream>

int main()
{
    std::cout << "This is a BMI Analyzer\n";
    std::cout << "What is your name?\n";
    std::string name;
    std::cin >> name;

    std::cout << "Are you entering your height as feet/inches or centimeters, " << name << "? \n";
    std::string FeetCenti;
    std::cin >> FeetCenti;

    int h1; //height feet inputted
    int h2; //height inches inputted
    double h3; //height in cm
    double weight1;
    int w1; //
    double h3Meters;
    double height1;
    double height2;


    if (FeetCenti == "feet" || FeetCenti == "inches" || FeetCenti == "ft") {

        std::cout << "\nEnter your height, what are the feet?: ";
        std::cin >> h1;
        std::cout << "\nEnter the inches: ";
        std::cin >> h2;
        height1 = h1 * 30.48;
        height2 = h2 * 2.54 ;
        h3 = height1 + height2;
        //Will convert this to cm

        h3Meters = h3 / 100.0;

    } else if (FeetCenti == "centimeters" || FeetCenti == "cm") {

        std::cout << "\nEnter your height in centimeters: ";
        std::cin >> h3;

        h3Meters = h3 / 100.0;


    } else {

        std::cout << "\nThat won't work. ";

        return 0;

    }

    std::cout << "Are you entering your weight as Kilograms or pounds? ";
    std::string kilolb;
    std::cin >> kilolb;

    if (kilolb == "Kilograms" || kilolb == "kg" || kilolb == "kgs") {

        std::cout << "\nEnter your weight in kilograms: ";
        std::cin >> w1;


    } else if (kilolb == "lb" || kilolb == "pounds" || kilolb == "lbs") {

        //Will convert this into kg
        std::cout << "\nEnter your weight in pounds: ";
        std::cin >> w1;
        weight1 = w1 * 0.4536;

    } else {

        std::cout << "\nThat won't work. ";

        return 0;

    }

    double bodyMassIndex;
    bodyMassIndex = w1 / (h3Meters * h3Meters);
    std::cout << name << ", your BMI (Body Mass Index) is " << bodyMassIndex << "\n";


}
```

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I changed some things around and rebuilt it, now it works fine. Next I have to add the underweight or overweight range.