

Create a BMI (Body Mass Index Calculator) calculator app that reads the user's weight in pounds and height in inches (or, if you prefer, the user's weight in kilograms and height in meters), then calculates and displays the user's body mass index. The app should also display the following information from the Department of Health and Human Services/ National Institutes of Health so the user can evaluate his/her BMI:

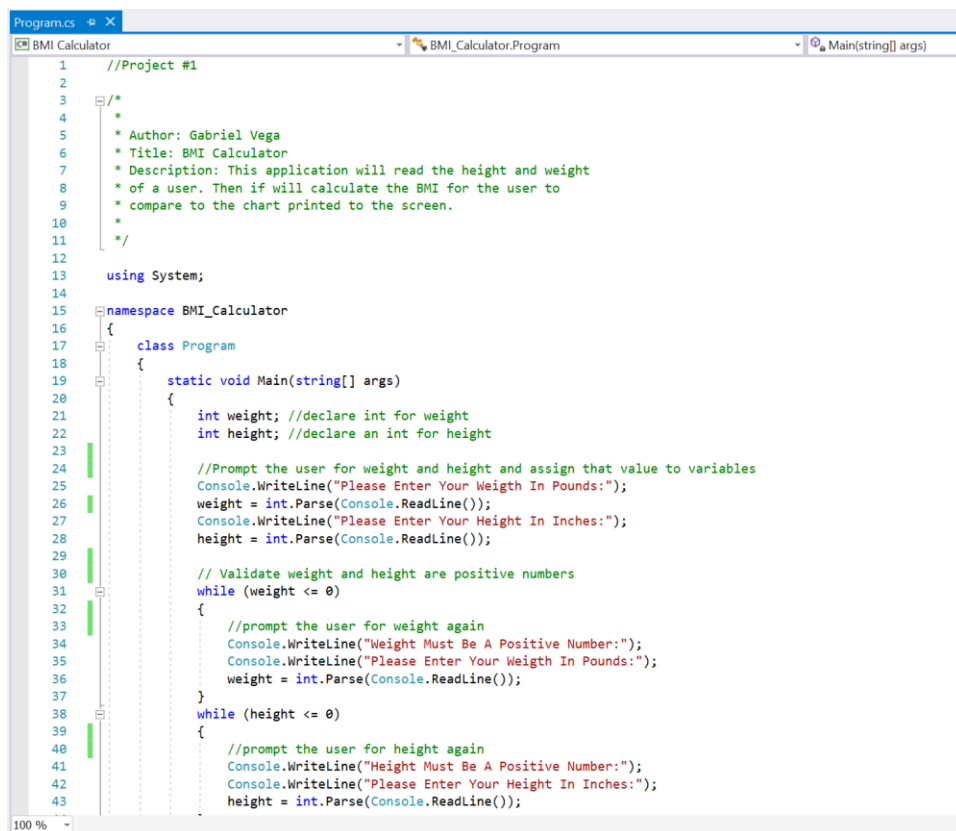
BMI VALUES

Underweight: less than 18.5

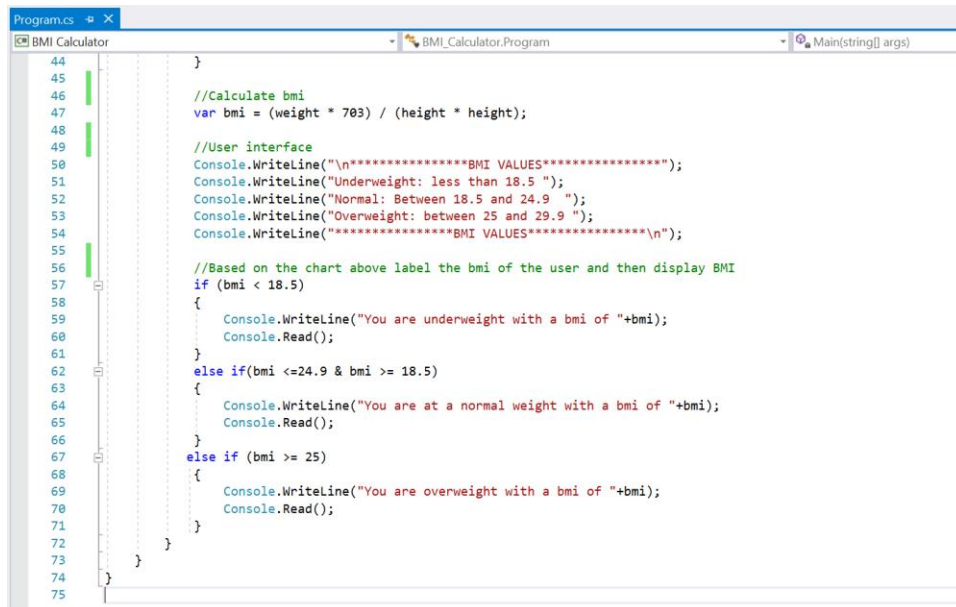
Normal: Between 18.5 and 24.9

Overweight: between 25 and 29.9

Part 1: Code



```
1 //Project #1
2
3 /*
4  *
5  * Author: Gabriel Vega
6  * Title: BMI Calculator
7  * Description: This application will read the height and weight
8  * of a user. Then it will calculate the BMI for the user to
9  * compare to the chart printed to the screen.
10  *
11  */
12
13 using System;
14
15 namespace BMI_Calculator
16 {
17     class Program
18     {
19         static void Main(string[] args)
20         {
21             int weight; //declare int for weight
22             int height; //declare an int for height
23
24             //Prompt the user for weight and height and assign that value to variables
25             Console.WriteLine("Please Enter Your Weight In Pounds:");
26             weight = int.Parse(Console.ReadLine());
27             Console.WriteLine("Please Enter Your Height In Inches:");
28             height = int.Parse(Console.ReadLine());
29
30             // Validate weight and height are positive numbers
31             while (weight <= 0)
32             {
33                 //prompt the user for weight again
34                 Console.WriteLine("Weight Must Be A Positive Number:");
35                 Console.WriteLine("Please Enter Your Weight In Pounds:");
36                 weight = int.Parse(Console.ReadLine());
37             }
38             while (height <= 0)
39             {
40                 //prompt the user for height again
41                 Console.WriteLine("Height Must Be A Positive Number:");
42                 Console.WriteLine("Please Enter Your Height In Inches:");
43                 height = int.Parse(Console.ReadLine());
44             }
45         }
46     }
47 }
```



```
44 }
45
46 //Calculate bmi
47 var bmi = (weight * 703) / (height * height);
48
49 //User interface
50 Console.WriteLine("\n*****BMI VALUES*****");
51 Console.WriteLine("Underweight: less than 18.5 ");
52 Console.WriteLine("Normal: Between 18.5 and 24.9 ");
53 Console.WriteLine("Overweight: between 25 and 29.9 ");
54 Console.WriteLine("*****BMI VALUES*****\n");
55
56 //Based on the chart above label the bmi of the user and then display BMI
57 if (bmi < 18.5)
58 {
59     Console.WriteLine("You are underweight with a bmi of "+bmi);
60     Console.Read();
61 }
62 else if(bmi <=24.9 & bmi >= 18.5)
63 {
64     Console.WriteLine("You are at a normal weight with a bmi of "+bmi);
65     Console.Read();
66 }
67 else if (bmi >= 25)
68 {
69     Console.WriteLine("You are overweight with a bmi of "+bmi);
70     Console.Read();
71 }
72 }
73 }
74 }
75 }
```

Part 2:

Design:

Requirements:

1. Read the users weight in pounds.
2. Read the users height in inches.
3. Calculates and displays the user's body mass index
4. The app should display the department of health and human services/National institutes of Health so the user can evaluate his/her BMI:

Pseudocode:

int weight;

int height;

Double bmi;

Prompt the user for weight;

Assign weight

Prompt the user for height;

Assign height

Validate user entered data.

Calculate BMI and assign bmi

Display data for bmi evaluation

Display user bmi

Part3:

UI and Output

