

# Python – BMI

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## Purpose

This template was made to help students with writing the complete program called [BMI](#) from CodeStepByStep.

## Description

Write a console program that prompts for user input and calculates 2 people's body mass index (BMI), using the following formula:

$$\text{BMI} = \text{weight} / \text{height}^2 * 703$$

The BMI rating groups each person into one of the following four categories:

BMI	Category
below 18.5	class 1
18.5 - 24.9	class 2
25.0 – 29.9	class 3
30.0 and up	class 4

Match the Sample Execution exactly and be sure to break down the problem using several functions. Help is provided below (if you need it) but try to complete this on your own. The python built-in round function can be used for precision.

```
def input_cal_bmi(num):  
    """  
    Prints the persons number, asks for the height  
    and weight from the user and then calculates  
    the users body mass index. The bmi is printed  
    to one decimal point of precision and the bmi  
    is returned.  
  
    BMI = weight / height^2 * 703  
  
    Parameters:  
    arg1 (int): Person number  
  
    Returns:  
    float: the calculated bmi  
    """  
    #todo
```

```

def category(bmi):
    """
    Prints the class/category of an individuals
    bmi based on a predefined chart.

    Parameters:
    arg1 (float): a bmi
    """

    #todo

def main():
    # print the first 2 lines
    # invoke input_calc_bmi passing the argument 1
    # and capture the value returned
    # invoke category passing the captured value

    # repeat the process above for Person 2.

if __name__ == "__main__":
    main()

```

## Program Shell

Create a file called bmi.py

## Sample Execution

This program reads data for two people  
and computes their body mass index (BMI).

```

Person 1 information:
height (in inches)? 70.0
weight (in pounds)? 194.25
BMI = 27.9
class 3

```

```

Person 2 information:
height (in inches)? 62.5
weight (in pounds)? 130.5
BMI = 23.5
class 2

```

Have a nice day!