

Programming Refresher Workshop

Exercise 2 (ex2): Body Mass Index

Given a person's weight in kilograms and height in meters, his/her BMI (Body Mass Index) is calculated based on this formula:

$$\text{BMI} = \text{Weight} / \text{Height}^2$$

The following table shows the body types according to a person's gender and BMI:

	Female	Male
Underweight	$\text{BMI} \leq 19$	$\text{BMI} \leq 20$
Acceptable	$19 < \text{BMI} \leq 24$	$20 < \text{BMI} \leq 25$
Overweight	$\text{BMI} > 24$	$\text{BMI} > 25$

Write a program to do the following:

1. Read the user's gender (type int), weight (type double) and height (type double).
2. Calculate the BMI for the person and display a suitable advice for the user.

Input

There are multiple lines of input and it is terminated by an EOF character.

Each line of input contains an integer G (representing Gender of the person; 0 represents female and 1 represents male) and two floating number W (representing the Weight) and H (representing the Height)

Output

For each line of input, output one of the following depending on the BMI computed.

You are overweight, time to join the gym!

Your weight is perfect. Maintain it!

You are underweight. Stuff yourself with more food!

Sample Input

0 62.0 1.6

1 62.0 1.6

1 61.5 1.8

Sample output

You are overweight, time to join the gym!

Your weight is perfect. Maintain it!

You are underweight. Stuff yourself with more food!