CCC '08 J1 - Body Mass Index

Time limit: 2.0s   **Memory limit:** 256M

Canadian Computing Competition: 2008 Stage 1, Junior #1

The Body Mass Index (BMI) is one of the calculations used by doctors to assess an adult's health. The doctor measures the patient's height (in metres) and weight (in kilograms), then calculates the BMI using the formula:

$$BMI = \frac{weight}{height \times height}$$

Write a program which takes the patient's weight and height as input, calculates the BMI, and displays the corresponding message from the table below.

BMI Category	Message
More than 25	Overweight
Between 18.5 and 25.0 (inclusive)	Normal weight
Less than 18.5	Underweight

Sample Input 1

```
69
1.73
```

Output for Sample Input 1

```
Normal weight
```

Explanation of Output for Sample Input 1

The BMI is $\frac{69}{1.73 \times 1.73}$ which is approximately 23.0545. According to the table, this is a "Normal weight".

Sample Input 2

```
84.5
1.8
```

Output for Sample Input 2

```
Overweight
```

Explanation of Output for Sample Input 2

The BMI is $\frac{84.5}{1.8 \times 1.8}$, which is approximately 26.0802. According to the table, this is "Overweight".