Day 5 –Weekend exercise work – please use functions for this problem

Let us apply our programming skills to some quasi-scientific problem - since it is bit dull to learn only abstract things.

The simple measure of body constitution was proposed at the middle of XIX century. It depends only on the height and weight of a person - and is called **Body Mass Index** or **BMI**. It is defined as:

**BMI = weight / height^2**

Where weight is taken in **kilograms** and height in **meters**.

Four general grades are proposed:

**Underweight - BMI < 18.5**

**Normal weight - 18.5 <= BMI < 25.0**

**Overweight - 25.0 <= BMI < 30.0**

**Obesity - 30.0 <= BMI**

For example, if I have weight of **80 kg** and height of **1.73 m** I can calculate:

**BMI = 80 / (1.73)^2 = 26.7**

i.e. somewhat overweight.

We will not discuss how proper or improper this gradation is. Instead you should simply calculate grades for several people.

**Input data** contain number of people in the first line.  
Other lines will contain two values each - weight in kilograms and height in metres.  
**Answer** should contain words **under**, **normal**, **over**, **obese** for each corresponding test-case, separated with spaces. For example:

**input data:**

**3**

**80 1.73**

**55 1.58**

**49 1.91**

**answer:**

**over normal under**