**Purpose**: simple decision making

**Learning outcomes**: 1, 2 and 3

**Time**: submit before 5pm Friday of Week 4.

**Resources**: MyLO: lecture notes and tutorial materials

**Task:**

Scientists measure an object's mass in kilograms and its corresponding weight on Earth in Newtons. If you know the of weight an object has in Newtons, you can calculate its mass in kilograms by using the following formula:

```
mass = weight / 9.8
```

(where 9.8 is the acceleration a mass feels due to the force of gravity)

Write a Python program that **asks the user** to enter an object's weight in Newtons, and then calculate and display its mass in kilograms. If the object's calculated mass is more than 500 kilograms, display a message indicating that it is **too heavy**. If the object's mass is less than 100 kilograms, display a message indicating that it is **too light**.

**Submission Details**

Upload the following to the MyLO submission folder for this task:

1. The source file (i.e. the **.py** file containing your code)
2. A screenshot of the Python shell window that shows the **execution results** of the source code.

**Assessment Criteria & Hints**

A completed submission **must**:

1. Include comments about the program purpose and the author of the program (your name)
2. Declare variables and assign initial values at the start of the program
3. Use meaningful names for variables, starting with a lower case
4. Use a constant variable (all UPPERCASE) to store the value of acceleration due to gravity
5. Ask the user to enter the weight (consider what *sort of data* will be entered)
6. Calculate the mass correctly
7. Display the resulting information properly
8. Submit both the source file and the screenshot