

## Mission #8

CS 1400 – Hilton

Body mass index is a measure of whether someone's weight is appropriate for their height. A body-mass-index value between 19 and 25 is considered to be in the normal range. Here's the formula for calculating body mass index:

$$bmi = \frac{704 \times weightInPounds}{heightInInches^2}$$

Implement a program that prompts the user for height and weight values and displays the associated body mass index.

Perform input validation by making sure that the user enters positive numbers for height and weight. Use error handling to catch any invalid input. See the sample session for details.

### Sample session:

```
Enter height in inches: hi
Invalid inches value. Must be a decimal number.
Re-enter height in inches: 0
Invalid inches value. Must be positive.
Re-enter height in inches: 69.25
Enter weight in pounds: dog
Invalid pounds value. Must be a decimal number.
Re-enter weight in pounds: -3
Invalid pounds value. Must be a decimal number.
Re-enter weight in pounds: -20
Invalid pounds value. Must be positive.
Re-enter weight in pounds: 150.5

Height = 69.25"
Weight = 150.5 pounds
Body mass index = 22.1
```

Submit your .java file containing the source code via WSU Online.