



CSC 135, Spring 2020
Dr. Urska Cvek
Lab 2

Assigned: 01-23-20
Due: 02-01-20 by 7 am

Problem 2.1

Write an application that prompts for and reads the numerator and denominator of a fraction as integers, then prints the decimal equivalent of the fraction with the maximum possible number of decimal values. Name your class *Fraction*.

Problem 2.2

Your program with a class *Hundreds* should read two integer values from the keyboard (the user). You can assume that the values read will have a hundreds' position.

The program should then find and print the hundreds digit in both of the integers to the screen and sum them together. For example, if the user enters 1456 and 232 respectively, then the program should print 4 and 2 followed by the sum of 6. Make sure to include the original values in the output (1456 and 232 in this case), followed by the digits in the hundreds position, followed by the sum (all of the values labeled).

Problem 2.3

The body mass index (BMI) is a ratio of a person's weight and height. This index can be used to determine if a weight is unhealthy for a certain height. The non-metric formula is as follows:

$$\text{BMI} = \text{weight} * 703 / \text{height} * \text{height}$$

Write an application that reads in the values of weight (in pounds) and height (in inches) from the user and prints out the BMI index as calculated based on the above formula. Make sure to correctly prompt the user for the values. Name your class *BMICalculator*.

Answer the above questions as programming projects in NetBeans.

Remember to use the Lab Submission Guidelines when submitting your work!