

## CS 2401 Assignment #2

**Due Date:** Sunday, September 17 2017, 11:59 PM. Note that every assignment must be demonstrated to the TA within one week after the deadline. You will not receive any credit without a demonstration.

**Objective:** The goal of this assignment is to practice 2-dimensional ragged arrays.

**Background:** Within a healthy, balanced diet, a grownup needs 2,250 calories a day. You will write a program to track calorie intake of a person.

**Assignment:** Calorie intake data from a person is provided in a text file named `input.txt`. There are arbitrary number of double values on each line, separated by spaces. The numbers represent the number of calories consumed for meals and/or snacks on a day. The file includes data for exactly one week starting from Monday. That is, the file contains **seven** lines of text. The topmost line is for Monday and the line at the bottom is for Sunday. Your program should read the data from the file into a 2-dimensional array. The number of rows of the 2-dimensional array must be equal to the number of valid lines in the file. The numbers in the  $i$ -th row of the 2-dimensional array must appear in the same sequence of numbers in the  $i$ -th row of the file. After reading the input file into the 2-dimensional array, report the following items.

- a list of total calories consumed each day
- a list of days when more calories than required are consumed
- average calories consumed during the  $i$ -th meal/snack (average over all seven days)

**You must write a method with exactly one 2-dimensional array parameter to compute each of the listed items above and display the result.**

**Example input file:**

```
800 1000 100
450 100 845 20 1200 200
1800 250 400
0 1500 800 120
600 500
700 1400 1700 100
675
```

**You should print an error message and terminate if there are not exactly 7 lines.**

**Deliverables:** The name of your source file must be `Fitness.java`. It must be submitted via Blackboard. Your TAs will let you know about any other requirements.