CMPT 120: Midterm 1

Coding Test February 9, 2018

Instructions

You are permitted 1 letter-sized reference sheet (double-sided) during this test.

Log into http://coursys.sfu.ca and complete the following questions for Midterm 1 - Coding Q1 and Midterm 1 - Coding Q2.

It must be submitted to **Coursys** <u>before 10:20am</u> to be considered for marks. You may not leave the lecture theatre before 10:20am.

REMEMBER to use **2** spaces instead of tab for indentation in your code submission.

You MAY NOT have any other browser tabs or applications open other than Coursys.

Midterm 1 - Coding Q1

Make a **World Traveller Bot** that asks you your name, and makes a comment about the first letter of your name (see example).

It should then ask you, one by one, whether you have been to each continent in the world: Asia, Europe, North America, South America, Australia, Africa and Antarctica. At the end, it will tell you how many continents out of 7 you have visited. Your program should use a loop. It should accept Yes/No and yes/no as answers.

Here is an example run:

```
What's your name?
Angelica
I like names that start with A!
Have you been to Asia?
yes
Have you been to Europe?
Yes
Have you been to North America?
yes
Have you been to South America?
No
Have you been to Australia?
No
Have you been to Africa?
no
Have you been to Antarctica?
no
I see, you've visited 3/7 continents!
:
```

Midterm 1 - Coding Q2

Write a **Semester Evaluator Bot** that asks you how many courses you are taking this semester.

For each of those courses, it should ask you for your rating out of 5. For example, if you are taking 3 courses, it should ask you 3 times for your rating out of 5. If you are taking 5 courses, it should ask you 5 times, and so on.

At the end, it should output your average rating for the semester and make a comment about it.

If your average rating is 1 or less, it should say **Ouch.** If your average rating is greater than 1 and less than 3, it should say **Not a bad semester.** If your average rating is greater than or equal to 3 and less than or equal to 5, it should say **Glad to hear that!**

Your program must use a loop.

Here are 3 example runs:

```
How many courses are you taking?

How do you rate course 1 out of 5? 1

How do you rate course 2 out of 5? 1

1.0? Ouch.
```

```
How many courses are you taking?

3

How do you rate course 1 out of 5? 3

How do you rate course 2 out of 5? 3

How do you rate course 3 out of 5? 2

2.666666666666666665? Not a bad semester.
```

```
How many courses are you taking?

4

How do you rate course 1 out of 5? 4

How do you rate course 2 out of 5? 4

How do you rate course 3 out of 5? 5

How do you rate course 4 out of 5? 4

4.25? Glad to hear that!
```