CPSC 470/570: Artificial Intelligence Assignment 0 (warmup, 2 points)

Introduction to Python3

Due Wednesday, January 23, 11:59:59 PM

I. Introduction

This assignment will introduce you to Python3 and give you a background needed for the class and further assignments.

II. Work environment

We encourage you to work on a Zoo machine as all the environment requirements (e.g. Python3) are set up for you. You can work directly on a Zoo computer (on the 3rd floor of AKW and in Hillhouse 17). For more advanced users, you are welcome to work on your local machine or SHH into the Zoo. For more information about the cluster and how to SSH into the Zoo, visit http://zoo.cs.yale.edu/newzoo/.

Go to Canvas and download the folder PS0. (There are three dots on the right when you move your mouse on the folder. Click on it and click on download, and it will download the entire folder.) You should see the following files:

- animals.py
- animals.txt
- assignment0.py
- sample_answers_solution
- sample.txt

III. Work with Python3

For this assignment, you have to complete 9 `TODO`'s from `assignment0.py`. We expect you to look up the documentation of Python3 to finish this assignment. The code should be relatively simple.

- `TODO 1, 2, 3, 4, 7` require you to insert 1 - 3 lines of code.
- `TODO 5, 6, 8, 9` require you to comment / uncomment one line.

Please read the file for specific instructions for each `TODO`.

The remaining files are:

- `animals.py`: defines the `Animal` class, which is used in `assignment0.py`.
- `animals.txt`: defines the *input* of the *private* test.
- `sample.txt`: defines the *input* of the *public* test.
- `sample_answers_solution.txt`: defines the *output* of the *public* test.

1. Test your implementation with public test

Finish `TODO 1, 2, 3, 4, 7` and leave the remaining `TODO`'s untouched.

To execute `assignment0.py`, just run the following command in the folder where you store the file:

```
python3 assignment0.py
```

You should see a new file, `sample_answers.txt`, generated. If this file is identical to `sample_answers_solution.txt`, and all the output on your terminal is the same as the ones indicated in the file, congratulations, you pass the public test! To test that the two files are identical, execute the following command:

```
diff sample_answers.txt sample_answers_solution.txt
```

2. Generate the final solution for private test

Finish `TODO 5, 6, 8, 9`. Then, re-execute the script. You should see a new file, `answers.txt`, generated. This file will be compared with our solution as a private test.

IV. Submit your assignment

- Make sure your assignment0 folder has the following files:
  - `assignment0.py` with your implementation
  - `sample_answers.txt` generated
  - `answers.txt` generated
  - `animals.py` without modification
  - `animals.txt` without modification
  - `samples.txt` without modification
  - `sample_answers_solution.txt` without modification
- Zip your `assignment0` folder and name it `[netID]-assignment0.zip`.
- Upload the zip file to Canvas.

V. Grading criteria

This assignment is worth two points.

- Public test: 1 point
- Private test: 1 point

VI. Late policy

We do not accept work pass the deadline.