

CS 5 spring 2017, hw 2 guidelines...

Optional comment theme for week #2: Recursive Jokes!

XKCD's recursive strip: <http://xkcd.com/688/>

A recursive bar joke

A guy walks into a bar and tells the Recursive Bar Joke, only he does it *much* better than I do.
(This joke gets funnier every time!)

A recursive light bulb joke

Q: How many twists does it take to replace a light bulb?

A: Is it already replaced? Then zero. If not, then twist it once, ask me again, and add 1 to my answer.

Some "recursive" or, at least, self-referential limericks:

There was a young fellow named Stan
Whose limericks never would scan
Wehn asked why that was,
He replied, "It's because
I always try to put as many words into the last line as I possibly can."

There once was a man from Peru
whole limericks all end on line two
... in the same spirit:
There once was a man from Verdun
... plus the unutterable limerick from Emperor Nero

There once was an X from Place B
Who satisfied Predicate P
The X did Thing A
In a specified way
Resulting in Circumstance C

[STEP 1 - readings]

- Grading reading responses: **5 pts: good!** **4pts: unconsidered** **<=3pts: what?!**
- The article: [Watson wins on Jeopardy!](#)
- The prompts (*OK if they addressed only one*, no harm if they touched on them all):
 1. What was the most interesting or important idea in this article to you—and why?
 2. What is an application that (in your opinion) Watson's technology might be able to contribute to? Alternatively, do you feel Watson's capabilities will not make much of an impact? You can look around for web articles on this, or you're welcome to speculate.
 3. Whether or not you had the chance to interact with the "Watson-like" Jeopardy game, comment on your sense of the similarities and/or differences between Watson-style and human-style thinking.
- Here is a [page of guidelines and possible comments for reading responses](#).

[STEP 2 - lab and autograded problems]

- this will be handled by the "lab team" - thank you, lab team!

[STEP 3 - problems to look at (for style + extra-credit)...]

- Some of this week's problems **should** have been autograded!
- Gold's hw2pr2 you may need to run; if you look it over and it looks all good, ok!
- Please *do* look over hw2pr2 for style & possible extra features...
- Also, please go over hw2pr4 (the extra-credit graphics :-)

Problem-by-problem grading guidelines

Gold hw2pr2 Sleepwalking and analysis (35 pts)

In general, you **do** need to run these - the two tests in red, below.

Feel free to use (a) Terminal, (b) Sublime, (c) in-browser Trinket, or (c) any other Python!

- **Extra-credit points**

- upto **+5pts** for unusual ASCII animations or features!
 - an unusual "sleepwalker" alone might be **1 or 2 points**
 - multiple sleepwalkers or state-changing ones would be **+5pts**
 - even more is possible for extra-crazy implementations!
 - **send me an email** of the logs of any **really great ones** worth sharing! (or just let me know)

- **Correctness points - you'll need to run two tests:**

- Copy or download their code and run **`rwpos(40, 10)`** and **`rwsteps(11, 1, 21)`**
- The first one prints 10 positions, randomly stepping from a start of 40
- The second one should animate a walker starting at location 11, wandering between location 1 and 21 until they get to a wall...
- **-7pts** if **`rwpos`** didn't work (make sure they **did** use `return...`; else -2)
- **-7pts** if **`rwsteps`** didn't work (do make sure there **is** a return value...; else -2)
They didn't have to get to the wall -- **next to** the wall is OK.
- **-7pts** if they didn't do anything on the **signed-displacement q_n**
 - 5 if they didn't have an `ave_signed_displacement(numtrials)` function
 - 3 if they didn't have any comment on it (should have been averaging to 0)
- **-5pts** if they didn't do anything on the **squared-displacement q_n** somehow
 - 5 if they didn't have an `ave_squared_displacement(numtrials)` function
 - 3 if they didn't have any comment on it (should have been averaging to N)
- **Style points**
 - take off **-2** points for any function with **no docstring**, up to -10 pts overall
 - take off **-3** points for any misnamed function (capitalization etc.)

- take off **-2** points for too little spacing (no space between functions, for example)

- Overall comment to the student...

- Please be encouraging! Copy-and-paste for efficiency (this week: **recursive jokes**: see above!)
- Be sure to briefly mention any style points missed and correctness problems

Gold hw2pr3 **Autograded! Don't need to check these...**

Gold hw2pr4 **Turtle Art extra-credit (up to +5 or more pts)**

Look over the screenshots submitted...

- Style - don't worry about

- Extra-credit points

- Is it a creative variation of one of the turtle-graphics problems? **+2-5 pts**
 - a single variation on one of the turtle functions alone might be **+2 or +3 points**
 - **+5pts** for a colorful tree with varying widths (or changing any **two** characteristics of the drawing)
 - even more extra-credit is possible for extra-crazy implementations!
 - let me know of the logins of any **really great ones** worth sharing!
- Is it something different and above-and-beyond in creativity or effort? **+8+pts**

How to get to this page:

The CS5 site should be top link when Googling

hmc cs5

These notes are linked at the bottom of CS5's page as

for grutors - guidelines

Also, the submissions site is at

cs.hmc.edu/submit

The hw we're grading:

<https://www.cs.hmc.edu/twiki/bin/view/CS5/Homework1Gold>