

Fall 2025, hw 6/7 ㄟ(ˊጋ)ㄟ grading for cs5

Gold

The hws we're grading (gold): [Link to gold HW: Hw 6, gold](#)

We don't have a comment theme for this week. Overall encouragement is good :-) !

Perhaps share [this fractal XKCD](#), since lab this week was fractals. Perhaps "life is fractal" is our theme?

hw6pr0.txt *reading responses: up to +10 out of 5 points...*

There were **two** articles if students responded to each, they could earn +5 extra (for +10/5pts)

+ As ever, feel free to respond to a facet of their response, e.g., agree/disagree/add a thought

The articles are at <https://www.cs.hmc.edu/twiki/bin/view/CS5/Reading6>

Article #1: Grace Hopper, *The Education of a Computer* (excerpt)

- This one had two prompts - they should have addressed both (-1 or -2 if not)

1. In *The Education of a Computer*, Hopper lists two drawbacks of "using subroutines," that is, of abstracting computation into reusable functions. Do you feel those two drawbacks still exist today? How important are they today? **Possible answer: the advantages outweigh the benefits today... (any well-expressed idea is OK, though)**
2. Hopper also numbers five advantages of "using subroutines" in the excerpt included above. Some important advantages of using high-level languages are not part of that list, however. Explain at least one advantage of a high-level language that Hopper does not list in *Education of a Computer*. This may be an idea of your own, for sure, or you might take one from those mentioned in her biography—presumably she continued expanding her arguments as time passed! **Possible answers: something involving Starbucks, perhaps? Other answers are OK, too – to be more serious, perhaps greater accessibility/applicability of computing tools...**

Article #2: from *The Guardian*, *Our Minds Can Be Hijacked* full article

- This one had two prompts - they should have addressed both (-1 or -2 if not)

1. What facts, opinions, or claims did you find surprising in this article? **Possibilities: anything reasonable is ok!**
2. Tristan Harris and Nir Eyal had the same advisor at Stanford and now hold rather different positions on the ethics of the "attention economy". Do you lean towards one of these positions more than the other? If so, explain where you lean on this issue and briefly explain why. If you don't lean one way or the other, please briefly explain your ambivalence. **Possibilities: anything thoughtful is ok here, too...**

- Here is our general [page of reading-scoring guidelines and possible comments](#)

cs5gold hw6pr1abcd, 2, 3, 4: "Hmmm-grading teams"

- + Look briefly at the file -- is it reasonable/ok? Commented more than 75%?
 - + if so, give the **full points available** (some were autograded)
 - + **-2 to -4** for too few lines commented (we won't count **nops** in this)
 - + hw6pr1d.py was a Python file... make sure unique looks complete,
- + For **hw6pr4** -- did they stick to the recursive template (**no submitting a plain loop!** :-)
 - + - Please take a look at these & make sure they both use recursion
 - + (and not iteration!)
 - + - Plus, this gives a chance to include an encouraging comment... e.g.,
 - + Possible comment: **Nice work on these Hmmm assembly-language problems! Perhaps Hmmm has convinced you that, in comparison, Python is really very friendly! (?) Good luck**

with the loops, fractals, Lights Out, and pi-estimation in hw #8!

+ **Short cuts:**

- + **Press 1** [to choose the comment #1], then
- + **Press z** [to save and go to the next UNGRADED] Be sure to use '**z**' !

cs5gold hw6pr5

- + This should be auto-graded for 20/20,
- + For the final 10/10 DO CHECK the LIST_ COMPREHENSIONS:
- + Here is an example of a 100% solution on **rwalk**:

```
Further Challenges:
• radius 5 : 25.4106 steps
• radius 6 : 36.393 steps
• radius 7 : 48.9878 steps
• radius 10: 99.1798 steps
• radius r : approximately r^2 steps
• distance from start after n steps: approximately sqrt(n) steps
```

- + (5/5 points total on this one)
- + and a 100% solution among the **untilARepeat** list comprehensions:

```
Here's what I got when I analyzed 10,000 calls of untilARepeat(365):

In [1]: sum(L)/len(L) # the average "birthday room" size
Out[1]: 24.9278!

In [2]: max(L) # the largest "birthday room"
Out[2]: 84!

In [3]: min(L) # the smallest "birthday room"
Out[3]: 2!

In [4]: 42 in L # did any have exactly 42 people?
Out[4]: True!

In [5]: L.count(2) # how many times did rooms have exactly 2 people?
Out[5]: 35!

In [6]: 1 in L # did any have exactly 1 person?
Out[6]: False!

In [7]: 142 in L # did any have exactly 142 people?
Out[7]: False!
```

- + (5/5 points total on this one)
- + if these are missing or partial, start from the "missing LC's comment" and adjust.
- + Also, **-2** for missing a docstring or two...
- + And, **-4** for wanton disregard of docstring norms...
- + **+4.2** for creative extra credit (especially here, where there was really no pathway for EC...!)

cs5gold + cs5black hw6pr6b

- + This should be auto-graded -- it's the extra-credit in Hmmm
- + The one thing is that these submissions should use function calls in Hmmm (including using the stack via pushr and popr). Check this by look it over...

Thank you, everyone, for grading CS5!

Worth keeping on all grading pages: XKCD's 10,000 strip: <http://xkcd.com/1053/>

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**

Older:

If we have time! Let's tackle ...

cs5gold **hw6ss5, hw6ss6 screenshots**

cs5gold **hw8ss1, hw8ss2 screenshots**

cs5gold **hw8pr1 (M. Set lab)**

cs5gold **hw6pr6a** **HTML Extra credit!...** **hw6pr6a**

- + These were the HTML pages! **Guidelines:**
- + Up to **+10 points standard**, **extra-extra-credit up to +12 total. Standard:**
 - + +4 for a before/after edited page (screenshots!)
 - + +3 for the HTML source file (just take a look...)
 - + +3 for a screenshot of the HTML with the various elements in it
 - + Numbered list and bulleted list
 - + An image and a hyperlink
 - + Different header-levels
 - + If they have extra stuff - or extra-cool stuff, give **up to +12 or a bit more...**
(be sure to call out what you liked!! :-)

As usual:

- **Add a comment, if needed** and then
- **Submit** everything (z)

Green

GREEN!

[editable guidelines](#)

[read-only full-course guidelines](#)

cs5black [10/26] **Week 6** ~ start with **hw6pr4.py**

~ we'll follow the gold guidelines for this week... EXCEPT

~ for us, let's grade hw6pr4 first:

- + Does it play? (if not, -6 or use your judgment)
- + Look over the design and modularity -- if reasonable maintain full points (12/12)
- + Also, take -6 points for NO docstrings or -2 or -4 for one or two docstrings missing
- + Smaller adjustments can be added/subtracted - up to you...

~ let's let the gold graders take the fully-autograded ones...

~ Thank you!!