

LEC 01

CSE 121

Printing, Strings, and Variables

Questions during Class?

Raise hand or send here

sli.do **#cse121**



BEFORE WE START

Talk to your neighbors:


What's your favourite YouTube or Twitch channel to watch?

Music: 🌸 [CSE 121 25sp Lecture Tunes](#) 🌸

Instructor: Miya Natsuhara

TAs:	Chloë	Hibbah	Sushma
	Ailsa	Julia	Kelsey
	Johnathan	Sahej	Shayna
	Christian	Ruslana	Hannah
	Merav	Hanna	Zach
	Judy	Maitreyi	
	Janvi	Ayesha	

Agenda

- **Announcements, Reminders** 
- Finish up syllabus overview:
 - Assessments, Grading, Academic Honesty & Collaboration
- HelloWorld Review
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Announcements, Reminders

- Check out [website](#) for links to all activities & materials
- Creative Project 0 will be out tonight, due Wednesday, April 9th
- Please do the [intro survey](#) by Sunday, Jan 12th
 - gives us valuable insight!
 - part of “post-section work” (will explain in a moment!)
 - important that Google Forms works in CSE 121
- New Ed tool: [Sandbox](#) (write all the code you want!)


Aside: office hours as a resource!

The IPL (TA office hours) will open on Monday (April 7) at 12:30 PM.

- one of the best parts of the course!
- but, TAs are instructed to not just give you the answer!
 - why not? you wouldn't be learning!
 - e.g. “my code doesn't work” versus
“I tried X, expected Y, but got Z. Thoughts on what to try next?”
 - also true for Miya's office hours too ;)

Expect an announcement on Ed with a detailed schedule soon!

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Assessment

Why assessment?

- Our goal: you gain **proficiency of the concepts and skills** we teach
- We *assess* your proficiency by asking you to apply these concepts and skills on tasks
- By necessity, we are assessing your work as a proxy for proficiency

Resubmissions

Learning takes time and doesn't always happen on the first try!

Each week, one previous assignment or project can be resubmitted

- Must be accompanied by reflection explaining your change(s)
- Grade on resubmission replaces original grade
- Assignments eligible for only 3 “cycles” after feedback released

We'll discuss more after our first assignment is graded. See [syllabus](#)!

Post-Section Work (PSW)

A “nudge” system: on section days with no quiz, you’ll have a light homework problem and/or set of reflection questions **due at midnight that same day**.

- **graded on effort** (and intentionally short)
- in quiz section, will do the problem & leave time to reflect
- your reflections are very helpful to your TAs!

If you complete 12 of the 16 post-section works, you’ll get an extra resub!

- no direct grade impact, think of it as optional/extra credit
- first PSW is the intro survey (as a **special exception for this first PSW**, it's due on Sunday April 6th)

Grading Scheme

Grades should reflect proficiency in course objectives.

All assignments, quizzes, and exams are graded with an “E/S/N” grade:

- **E (Excellent)**
- **S (Satisfactory)**
- **N (Not Yet)**

Grading Assessments

E/S/N (or ESN) grades per assessment type:

- Programming Assignments: 4 ESN grades (4 assignments, 16 total)
- Creative Projects: 1 ESN grade (4 projects, 4 total)
- Quizzes: 3 ESN grades (3 quizzes, 9 total)
- Final Exam: 6 ESN grades

We will also ignore your lowest 2 quiz/final exam grades.

Course Grades

We provide a “minimum grade guarantee” for translating to a numeric grade, but *not* a direct formula.

Much more on this in the [syllabus](#)! (and over the next few weeks)

Minimum Grade	Requirements
<i>Total ESN available</i>	33
3.5	27 Es and 3 additional S+
3.0	22 Es and 5 additional S+
2.5	17 Es and 7 additional S+
2.0	21 S+
1.5	14 S+
0.7	8 S+

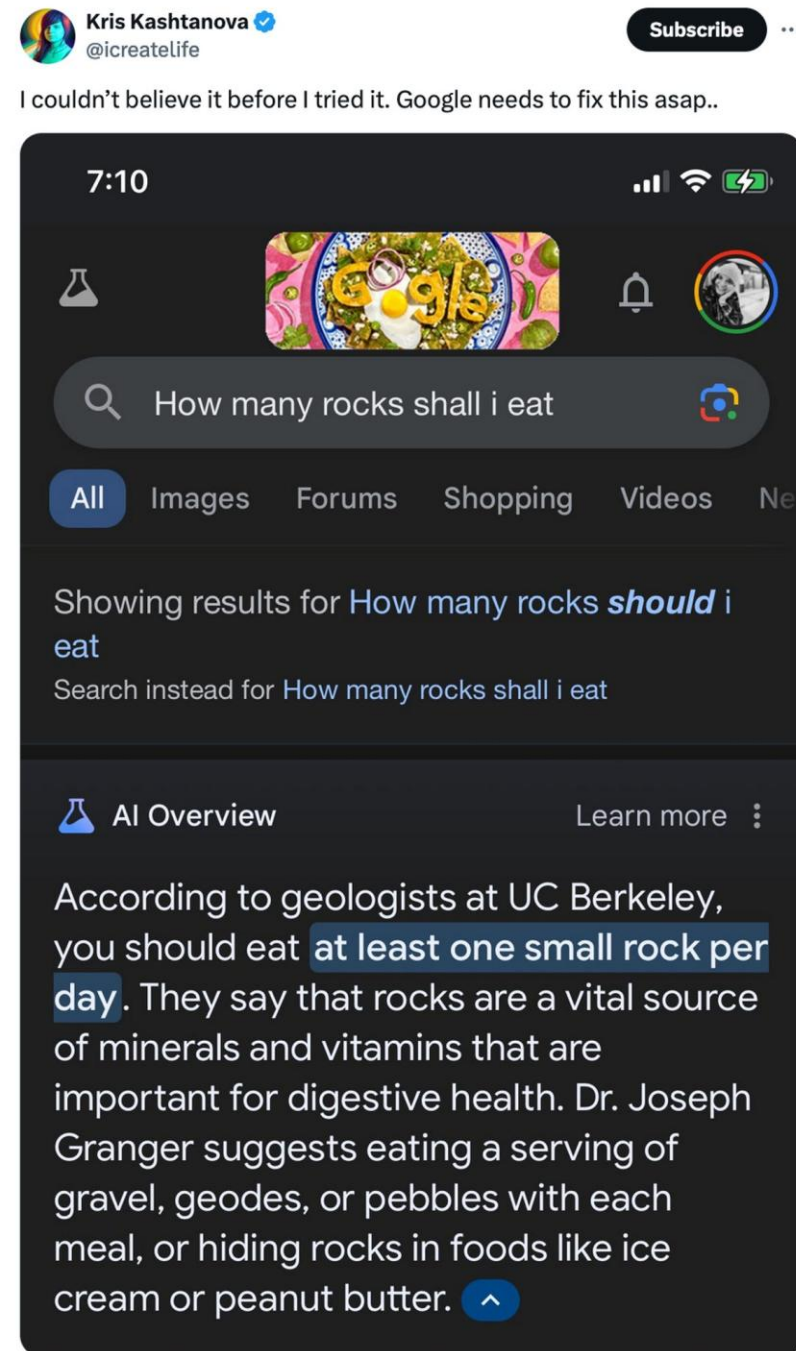
Collaboration Policy

When we assess your work in this class, we need to know that it's yours.
Unless specified otherwise, **all graded work must be completed individually**.

Some rules to highlight:

- do not share your own solution code or view solution code from any source – including (but not limited to) other students, tutors, or the internet
- do not use AI tools (e.g. ChatGPT) on graded work in any capacity

See [syllabus](#) for more details (this is **very** important to understand).



Courtesy "[Glue in Pizza? Eat Rocks? Google's AI Search Is Mocked for Bizarre Answers](#)" by Ian Sherr for CNET. May 24, 2024


Just a bit more on AI...

With generative AI tools, there's a few things going on:

- making sure that your assessed work is yours
 - just the same as other interactive resources
- making sure that you're learning correct information
 - hard for you to judge if you're a beginner!
- potential environmental & ethical concerns
 - outside of scope of 121, but important!

Happy to talk more about this if you'd like! (e.g. in office hours)

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Code Quality

"Programs are meant to be read by humans and only incidentally for computers to execute." –Abelson & Sussman, SICP

Code is about *communication*. Writing code with good **code quality** is important to communicate effectively.

Different organizations have different *standards* for code quality.

- Doesn't mean that any one standard is wrong! (e.g., APA, MLA, Chicago, IEEE, ...)
- Consistency is very helpful within a project
- See our [Code Quality Guide](#) for the standards we will all use in CSE 122

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PCM: Printing, Strings, Variables

- `System.out.print(...)`
 - Prints the given text to the console
- `System.out.println(...)`
 - Prints the given text to the console, and then moves to the next line
- String literals: a sequence of characters that are *strung* together, begin and end with `""`
 - Example: `"hello"`
- Variables allow us to give a name to a specific value
 - 3 parts: declaration, initialization, usage
 - Example:

```
String theBestBoy = "gumball";  
System.out.println(x);
```



Practice: Think

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How many lines of output would the following code produce?

```
System.out.println("hello");  
System.out.print("moi");  
System.out.print("bonjour");  
System.out.println("pryvit");  
System.out.print("nihao");  
System.out.println("hola");
```

a) 1

b) 2

c) 3

d) 4

e) 5

f) 6



Practice: Pair

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#cse121

How many lines of output would the following code produce?

```
System.out.println("hello");  
System.out.print("moi");  
System.out.print("bonjour");  
System.out.println("pryvit");  
System.out.print("nihao");  
System.out.println("hola");
```

a) 1

b) 2

c) 3

d) 4

e) 5


f) 6

Escape sequences


escape sequence: a special sequence of characters used to represent certain special characters in a String.

- `\"` to produce `"` in a String
- `\\` to produce `\` in a String
- `\n` to produce a new line character (or line break) in a String
 - note: in our class, we will ask you not to use this
- and many more!

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Creative Project 0 (“C0”): Hello Bugs?! (1/2)

By release date of assignment, all the relevant content will be covered.

- e.g. C0 is just about printing, strings, and escape characters

Assignments are *partially* about “does your program work”, but also:

- tests your ability to read a specification
- is graded on **code quality**
- includes a **graded reflection** (don't leave this to the last minute)
 - some metacognition, some societal impact & ethics content

Creative Project 0 (“C0”): Hello Bugs?! (2/2)

This specific assignment...

- has two parts: “Basic Task” and “Creative Extension” (do both!)
- has an optional set of code quality slides (to help you practice)
- intentional gentle onboarding to computer programming
 - **is not meant to be time-consuming or stressful**
 - but also, not representative of all assignments (or programs)

We look forward to seeing your bugs!!