CSE 121 Lesson 1: Printing, Strings, and Variables

Matt Wang & Brett Wortzman

Autumn 2024



| Abby | Afifah | Ailsa | Alice | Aliyan | Arohan |
|----------|-------------|---------|----------|-----------|---------|
| Chloë | Christopher | Dalton | Derek | Elizabeth | Ethan |
| Hanna | Hannah | Heather | Hibbah | Janvi | Jasmine |
| Judy | Julia | Kelsey | Lucas | Luke | Mahima |
| Maitreyi | Maria | Merav | Minh | Neha | Ronald |
| Ruslana | Sahej | Sam | Samrutha | Sushma | Vivian |
| Yijia | Zachary | | | | 4.24 |

Today's playlist: 121 24au lecture tunes

TAs:

Announcements, Reminders

- Check out <u>website</u> for links to all activities, materials
- Creative Project 0 will be out tonight, due Wed Oct 2
- Section Work 0 (survey) extended to Sun Sep 29
 - one-time extension (see: website instructions on forms)
 - important Google Forms works for 121
- New Ed materials: <u>Sandbox</u>
- Matt's office hours are out (incl. one today at 12:30)

Aside: office hours as a resource!

The IPL (TA office hours) will open on Monday (Sep 30)

- one of the best parts of the course!!
- but: TAs are instructed to <u>not just give you the answer!</u>
 - why not? you wouldn't be learning!
 - e.g. "my code doesn't work" versus "I tried X, expected Y, but got Z. Any thoughts on what to try next?"

Will get another announcement in Ed about this soon!

Intro Survey – things we're excited for!

- "Just learning the basics of how to code honestly. It's something I've always wanted to learn and I'm excited to jump in."
- "I have never taken a CS class, so I really don't know what to expect.
 I'm excited to learn and to see if I'm interested in this field."
- "Learning Java and how I can use this language to help others"
- "Writing codes that can do cool stuff (I don't know what cool stuff I'm referring to tho)"
- "Being able to problem solve while being creative"
- "Learning how to code and meet friends!!"

Reassuring worries from intro survey (1/3)

Common: responses along the lines of...

- "not knowing Java beforehand"
- "I'm most nervous about my lack of experience with computer science."
- "I don't know at all how to code in Java."
- "Having zero experience in coding or comp sci."
- "Not having enough experience to succeed."

We're <u>all</u> in the same boat here, and you're in the right place! This class expects <u>zero prior knowledge</u>.

Reassuring worries from intro survey (2/3)

Difficulty, workload, pace, & falling behind

- recognizing that programming can be difficult (if it was easy: why have a class?)
- as a result, have built many support systems (section, IPL, office hours, Ed, etc.)
- if you feel like you're struggling: reach out early!
 - especially with pace of quarter system

Grades, competitiveness, this class being a "weed-out" class

- explicitly <u>not</u> the goal of this class
- course designed against this (minimum grade guarantees, resubmissions, etc.)

Reassuring worries from intro survey (3/3)

Time management

- can be tricky especially if you're starting college this quarter!
- biggest advice: start early (and give yourself time to ask for help)

Struggling with technology / not being a computer person / Ed is new

- this can be hard (and is important)! if you're confused please ask!
- along the way, we'll teach some small skills (e.g. searching "smart", shortcuts)

Not being a math or STEM "person"

- in our opinion, everybody can be a math or STEM person :)
- fun fact: some of our CSE professors were originally completely different majors!!



Finding groups?

A good chunk of people asked about finding study groups! Some thoughts:

- as you'll see today, we do lots of pair/group learning in class.
 vibe well with someone? ask them to study:)
- say hi to folks in section, office hours, and the IPL!
- sit beside someone!

Some fun things about y'all...

- "I also do arigumi!"
- "I deadlift 600lbs"
- "I slept through an earthquake."
- "I'm platinum 1 in Valorant"
- "I am a certified rescue scuba diver!"
- "I've kissed a stingray before."
- "I am in the Pixar movie Cars."

... and some fun facts!

- "Platypuses are venomous"
- "That giraffes have blue tongues?"
- "Scotland's national animal is the unicorn." (x2!!)
- "Australia is wider than the moon"
- "Lighters were invented before matches"
- "The probability of you getting killed by a cow is low, but never zero"
- "one billion lions could totally beat the sun"

Syllabus Agenda (6/7)

- About us
- About this course
 - Learning objectives
 - Other similar courses
 - Course components
- Our learning model

- Tools and resources
 - Course Website
 - Ed
- Assessment and grading
- Collaboration

Assessment

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

Grading (1/2)

Grades should reflect proficiency in course objectives.

All assignments, quizzes, and exams will be graded with an "E/S/N" grade:

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

Grading (2/2)

E/S/N grades per assessment type:

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

We also "drop" your lowest 2 quiz/final exam grades.

For more information – see <u>syllabus</u>!

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 write-up explaining change (reflection!)
- Grade on your resubmission <u>replaces</u> original grade
- Assignments eligible to resubmit for only 3 "cycles" after feedback released

We'll discuss this more when our first assignment is graded; also, see syllabus!

Syllabus Agenda (7/7)

- About us
- About this course
 - Learning objectives
 - Other similar courses
 - Course components
- Our learning model

- Tools and resources
 - Course Website
 - Ed
- Assessment and grading
- Collaboration

Collaboration Policy

When we assess your work in this class, we need to know that it's <u>yours</u>. Unless otherwise specified, 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).

Activities in Class

- Goal: To get you actively participating in your learning!
- May ask you to think and volunteer a suggestion
- May ask you poll in with a response (via slido)
- Not graded but strongly encouraged to maximize your learning and use of class time!

- Common Format: Think, Pair, Share
 - Question is posed
 - Think about the question on your own
 - Pair up with your neighbor and discuss the question
 - Focus on how you arrived at your answers, whether they're the same or different!
 - Share what you discussed with the rest of the class!

Poll in with your answer!

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");
```



b) 2

c) 3

d) 5

e) 6



sli.do #cse121







6 Food for Thought **6** Em 1





An occasional module where we talk about bigger-picture ideas in computer science related to our lecture topic(s) of the week.

Goals:

- 1. give you "conversational familiarity" with CS terminology
- 2. see how CS interacts with other fields and people!
- 3. point you in the direction of more CSE (or adjacent) classes

Note: not tested content. Just food for thought:)

What's in a (variable) name or String?

Switch over to <u>Ed</u> and do some experiments (with a partner)! Then, report back on sli.do.

- 1. What types of characters are "allowed" in Strings?
- 2. What types of characters are "allowed" in variable names?



Dessert for Thought!

This is the beginning of a very interesting rabbit hole! But also, a decision made by the Java designers.

You will also make decisions like these!

- for example, what is a "valid name"?
- something to reflect on as you learn more about CS...

Announcements, Reminders (again)

- Check out <u>website</u> for links to all activities, materials
- Creative Project 0 will be out tonight, due Wed Oct 2
- Section Work 0 (survey) extended to Sun Sep 29
 - one-time extension (see: website instructions on forms)
 - important Google Forms works for 121
- New Ed materials: <u>Sandbox</u>
- Matt's office hours are out (incl. one today at 12:30)