# CSE 11 Accelerated Intro to Programming Lecture 12

Greg Miranda, Summer 1 2021

#### Announcements

- PA6 released today
  - Shorter PA due Sunday
- 6℃ PA7 released on Sunday, due Wednesday @ 11:59pm
  - → PA2 & PA3 resubmissions due Friday @ 11:59pm
    - No tutoring hours on Friday
  - → Lecture Quiz 5 due today @ 11:59pm
  - → Lecture Quiz 6 released today, due Saturday @ 11:59pm
    - Exam 1
    - Tomorrow releasing at 12am (i.e. late tonight)
      - Due **(1)** @ 4pm **PT**
      - Details on Piazza

# For-each Loop (enhanced for loop)

```
for (<type> <name> : <array>) {
     <body>
}
```

### Counted For Loop

- Three parts (besides the loop body)
  - Initializer
    - Usually, a variable definition
  - Test / condition
    - Expression that must evaluate to a boolean
  - Update
    - Usually, a variable update

# Counted For Loop

```
for ( <initializer> ; <test> ; <update> ) {
      <loop body>
}
```

#### Nested Loops

- Loops are a kind of statement
  - They can go inside loop bodies!

```
for (int row = 0; row < height; row += 1) {
   for (int col = 0; col < width; col += 1) {
      <loop body>
   }
}
```