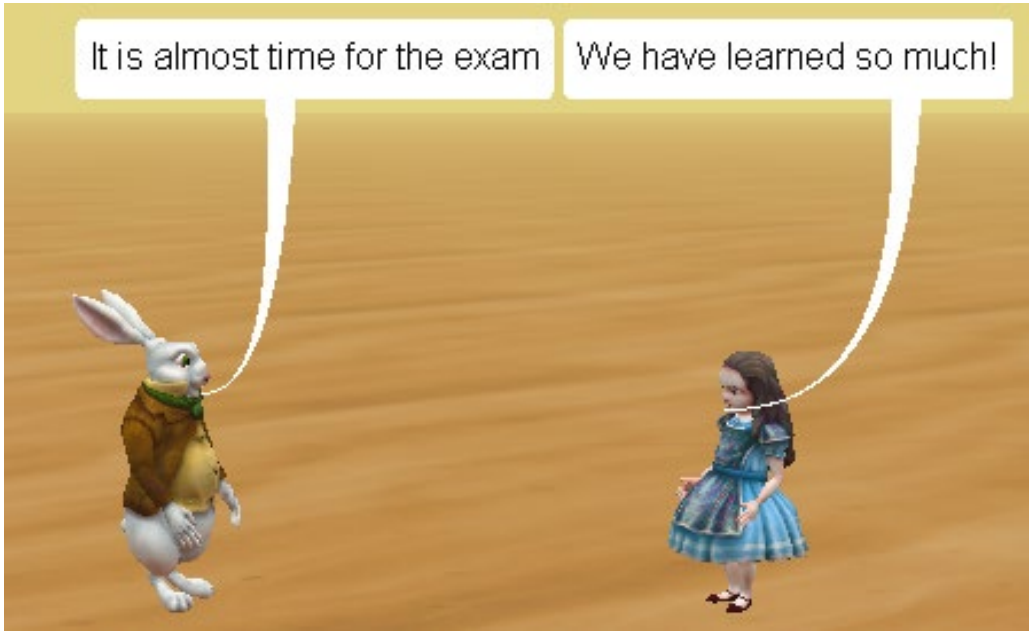
CompSci 94
Review for Exam1
September 29, 2022



Prof. Susan Rodger

Class Today

- Review for Exam 1
- For Thursday Oct 6, next quiz and videos
- Exam 1 is Tuesday, Oct 4
  - Old tests are on course website, Resources tab
  - See them on today's date with problems marked out (we have not done if, loops and written functions yet)
- Checkoff classwork you have done, also ok to check classwork 8 from Sept 27 in next class period with classwork, on Oct 6!

Exam Logistics

- Exam is on paper
- Tuesday, Oct 4, regular class time
  - More time if you get accommodations
  - Should have gotten email from me
- The exam is your own work
- Do not talk about the exam with anyone until it is handed back
- See the Exam1 reference sheet
  - Alice snapshots of procedure names provided

Exam Topics - Alice

- Alice Videos on warpwire
  - 2.x, 3.x, 4.1.0-4.2.2
- Setup, camera markers, invisible object markers
- Built-in procedures and functions
- Built-in properties: vehicle, opacity, height, etc
- Do in order, Do together
- Write a procedure with parameters
- Use procedure with arguments
- Random numbers, constant variables

Best Way to Study for Exam

- Study Lecture notes, watch video again
- Study Classwork
  - Can you write a procedure on paper or type in file?
  - Try to recreate a classwork or write on paper
- Old exams are available on course web page
  - See "Old Tests" link (on resources tab)
  - **Practice writing methods on paper**
- Old Reading Quizzes available today as practice quizzes (for no credit) - part of studying
  - More important – practice writing code

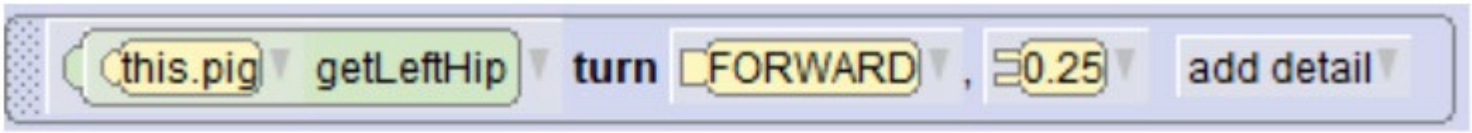
Old exams

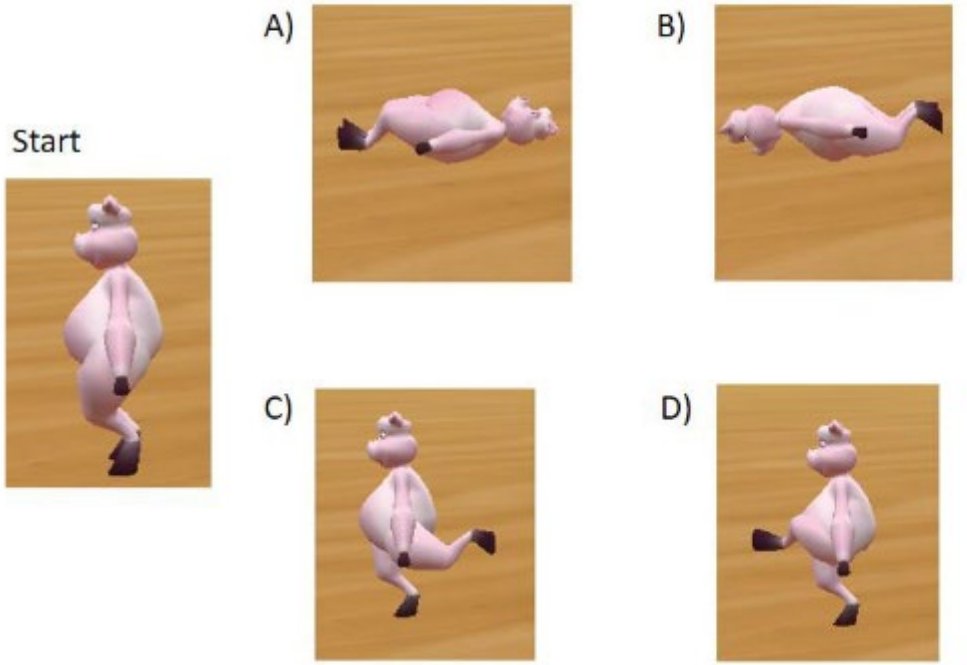
- On resources tab on course web page
- Fall 2021, Fall 2020, Fall 2019 and Spring 2019 – most like your exam
- Fall 2018, Spring 2018 – Alice 3 (material in different order)
- All other exams are Alice 2, which is different
- **Ignore HTML, CSS, IF stmts, loops questions**
- **See list of questions to study, ignore other ones**
- No classwork today, just review.
- Practice writing code on paper

Some Practice questions

Problem 1

- Consider the following Alice code and the pig is standing straight up as shown with Start in the figure on the left below. Which figure A)-D) is where the pig will be after this line of code is executed?





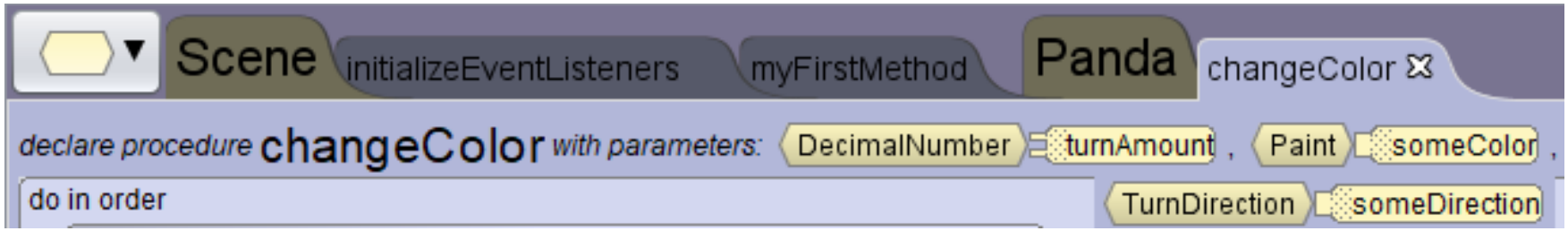
You should practice writing code

- Practice writing code from classworks and old exams

Problem 2
Write **panda** Procedure **changeColor**

- This procedure has **three parameters**
  - One parameter of type **Decimal** named **turnAmount**
  - One parameter of type **Paint** named **someColor**
  - One parameter of type TurnDirection named **someDirection.**
- When called, taking 3 seconds total, the panda turns around the turnAmount in the direction someDirection while at the same time changing to the color someColor.

Write the procedure changeColor



Give the two calls to changeColor

- Give the call that has the panda turn right twice while turning Blue

- Give the call that has the panda turn left 1.5 times while turning Green

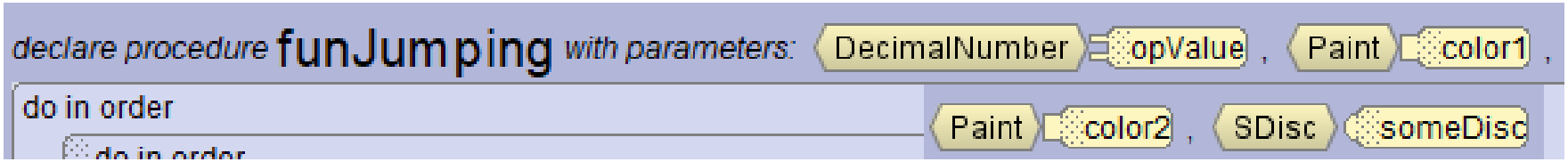
Problem 3:
Write **Bunny** Procedure **funJumping**

- This procedure has **four parameters**
  - One parameter of type **Decimal** named **opValue**
  - Two parameters of type **Paint** named **color1, color2**
  - One parameter of type Sdisc named **someDisc**
- Before called, the bunny is standing on a disc that will be passed as an argument

funJumping story(cont)

- The disc moves up 1 and back down to the ground carrying the bunny up and down with it. As the disc moves up it changes its color to color1 and the bunny changes its color to color2.
- Next the bunny changes its opacity to opValue
- The disc moves up 1 and back down again with the bunny
- Then instantly, the bunny turns back to its original color, the bunny is no longer faded and the disc disappears.

Write the procedure funJumping



Now let's look at some old exams