

Lecture 02

Office Hours 101, The "Moves", and Quiz 0

Checking in to Office Hours

<https://www.youtube.com/watch?v=Ye5GEJuAtE>

Registering for Course.Care

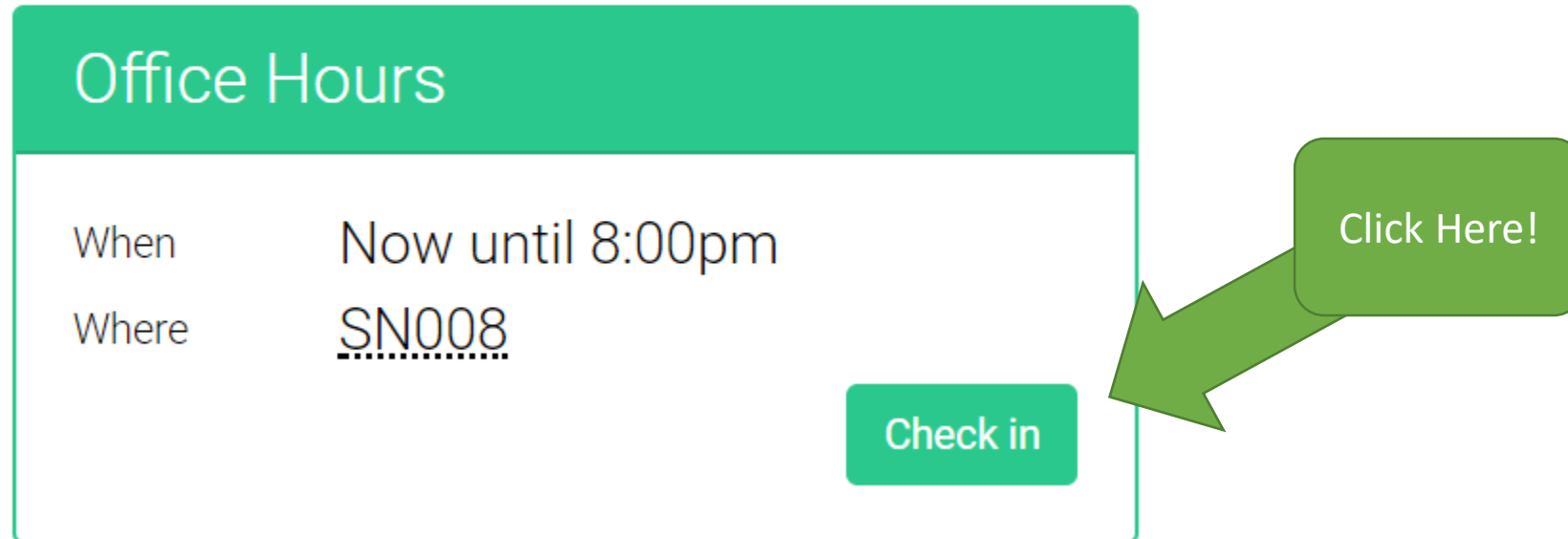
- If you have not registered for Course.Care yet, there's a link at the bottom of your My110 page to kick-off registration
- Otherwise, the course code is: **3353C6**

Office Hours Check-in Process

Click on "Get Help" on the course home page

INTRODUCTION TO PROGRAMMING

COMP 101

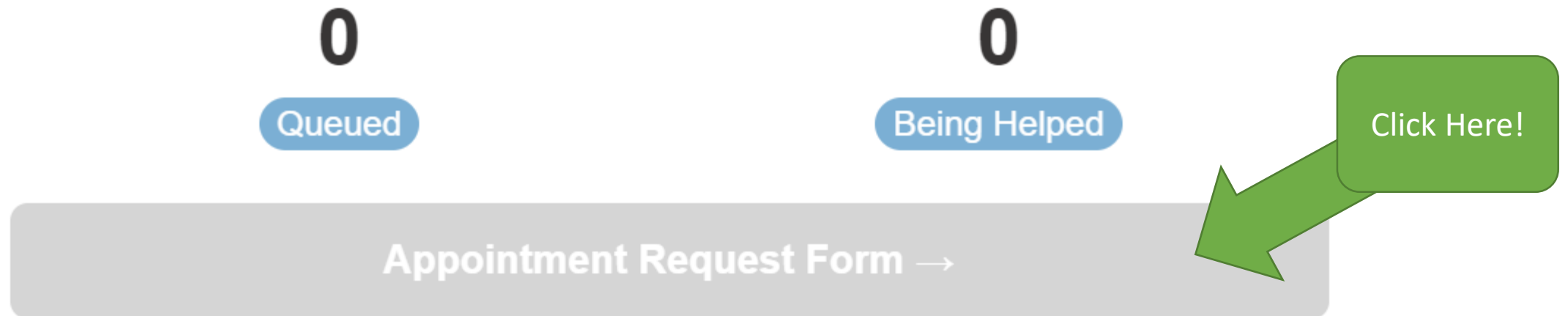


The screenshot shows a web interface for office hours. At the top is a green header with the text "Office Hours". Below this is a white box containing the following information:

When	Now until 8:00pm
Where	<u>SN008</u>

At the bottom right of this white box is a green button labeled "Check in". A green arrow points from a callout box containing the text "Click Here!" to the "Check in" button.

Office Hours Check-in Process



You can see how many people are currently waiting to be helped and currently being helped ahead of you.

Office Hours Check-in Process

What brings you to office hours today?

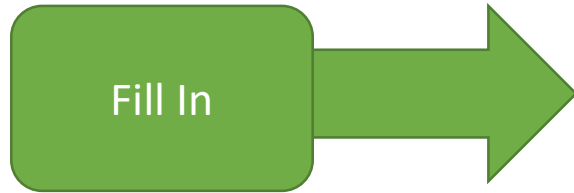
Assignment Help

Conceptual Questions

Select One!



Office Hours Check-in Process



IMPORTANT: You must demonstrate **effort and thought** in these fields. If you do not, the TAs are instructed to **cancel** your request so you can try again.

1. What section of the assignment do you need help with?

2. Describe in English what are you trying to express in code:

3. What concepts do you need to use to solve this problem?

4. What have you tried? Why do you suspect it didn't work?

Disclaimer: Your help request will be cancelled if you cannot provide meaningful responses to each question.

Cancel

Get Help →

Office Hours Check-in Process

Appointment Request

You're up next! A COMP110 team member will call your ticket soon :)

You must show up within two minutes or lose your spot in line.

Cancel Appointment

Office Hours Check-in Process

Kris is ready for you!



Come on in to SN008! You must show up within two

minutes or lose your spot in line.

Cancel Appointment

Announcements

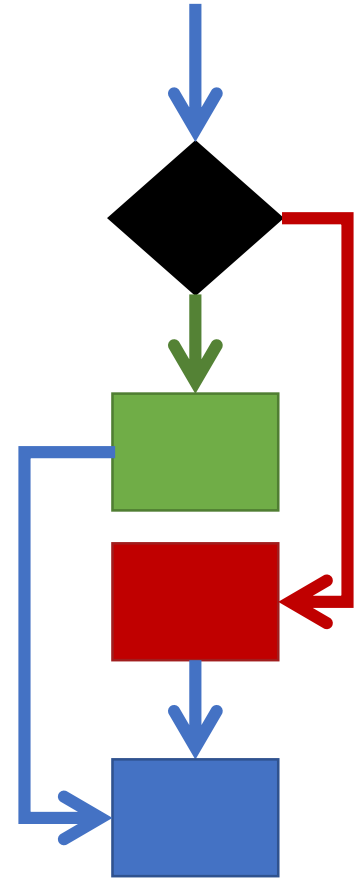
- Videos to watch before Thursday's Lecture
 - 04 – Visual Studio Code Walkthrough (7min)
 - 05 – The main Function, introcs Library, and Prompting (7min)
 - 06 – Boolean Expressions – Relational, Equality, and Logical Operators (6min)
 - 07 – if-then-else Conditional Control Statements (8min)
 - Reminder: 1 page of hand-written notes for warm-up questions
- Problem Set 0 – A Card for Someone Special – Due Thursday at 11:59pm

Videos 0 through 3 Graded Warm-up Questions

- You may have out a single sheet of handwritten notes
- Complete the 10 questions in order
 - Caution: PollEv does not allow going back to change responses
- We will spend 10 minutes on this. When complete, please do not do anything to distract your neighbors.
- Open **pollev.com/compunc**
 - Register quickly if needed.

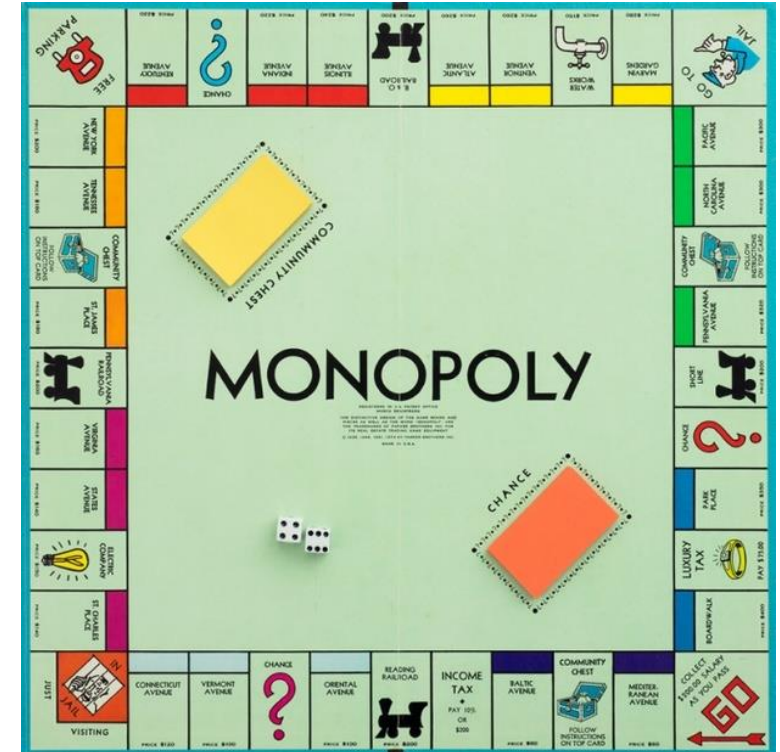
Control Flow or "The Moves"

- The next unit will focus on **Control Flow**
- This refers to how the computer *moves* through processing your instructions
- We'll introduce these to you our own made up phrase: *the moves*.



Think about a board game like **Monopoly**...

- Imagine you rolled a 1 every time.
You **move** forward one space at a time.
- *Until* you reach a special square, i.e.:
 - **Chance Card Square**
 - A special move card can *jump* you around the board.
 - **Go to Jail Square**
 - Move all the way backwards to jail.
 - **How do you get out of jail?**
 - *If* you roll doubles, *then* you move forward by the number of spaces shown by the throw.

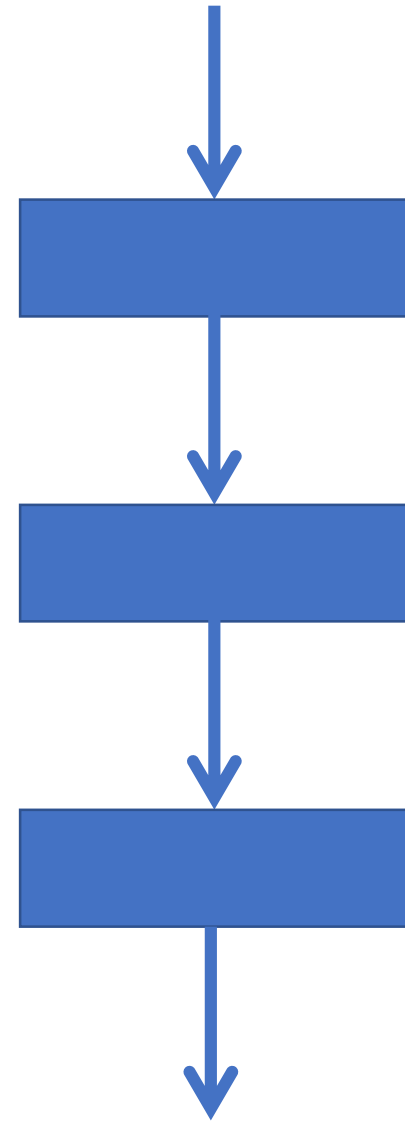


The Moves

- Like a board game, special moves exist in programs
- In COMP110, there are **3 moves** you will learn in the upcoming unit:
 - ~~1. Step Forward~~
 2. Conditionals (`if-then-else`)
 3. Loops (`while`)
 4. Function Calls
- In COMP401, you'll only learn **1 other move: "Exception"**

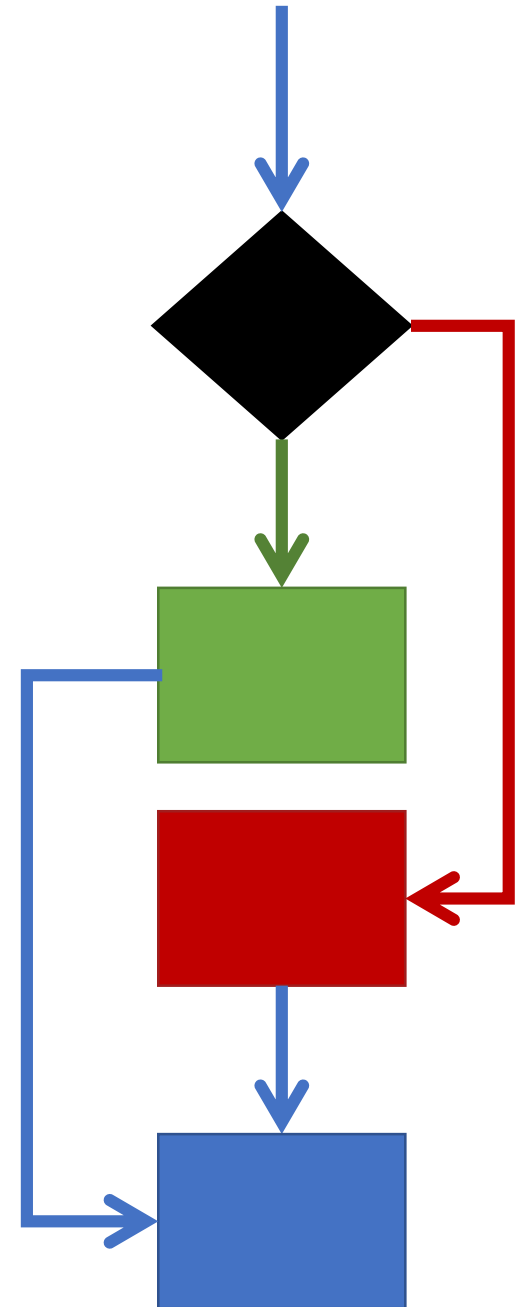
Move #1 – Step Forward

- You already know this one!
- The computer will process one line of code. Then it will process the next right after it. And the next...
- **Until** it encounters a *special* move or the end of the program.



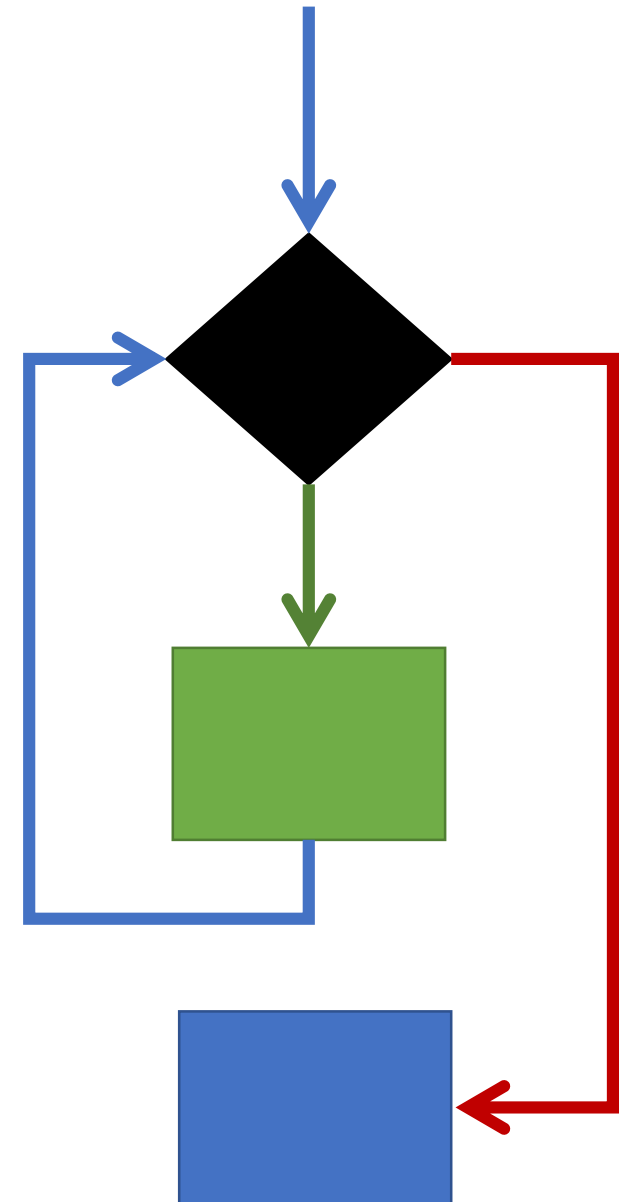
Move #2 – Conditionals

- Based on some test (**boolean!**)...
- **if** the test is true
 - *then* the computer will continue to the next statement.
- **else** it will jump to a specific statement further down in your program
 - more on the exact rules next lecture



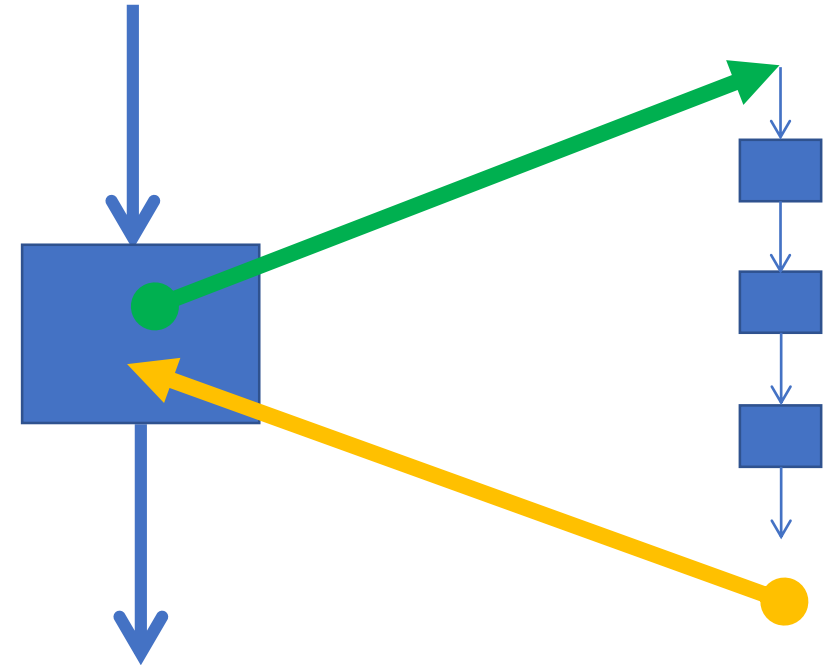
Move #3 – Loops

- Also based on some test (**boolean!**)...
- **if** the test is true
 - **then** the computer will continue to the next line.
 - at a specific point, the loop will **jump back up** to the test and run the test again.
- **else** it will jump to a specific line further down in your code
- You'll go loopy next week.



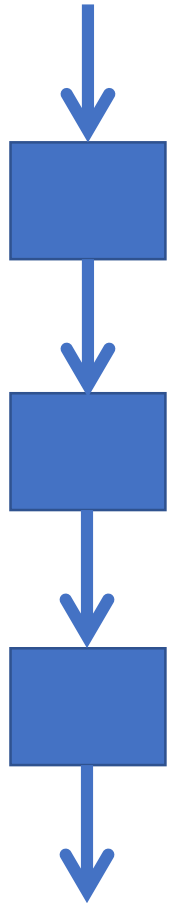
Move #4 – Function Calls

- The **function call** move is beautiful and magical. It's the power move.
- The computer *drops a bookmark* where the function call occurs and *jumps* into the function... *magic happens*...
- ...the computer then **returns** right to *the bookmark it dropped*, often with some data and the program continues on, business as usual.
- You've *already* used some function calls!
 - `print("hello, world");`

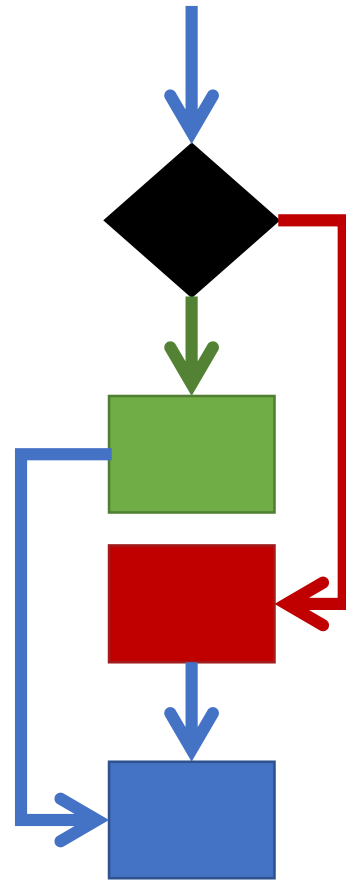


The Moves

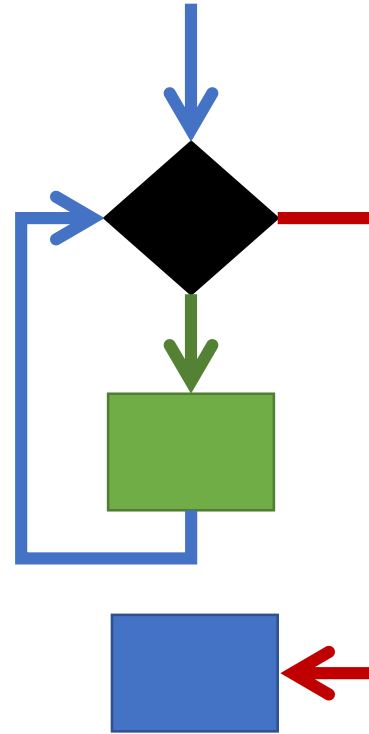
Next Line



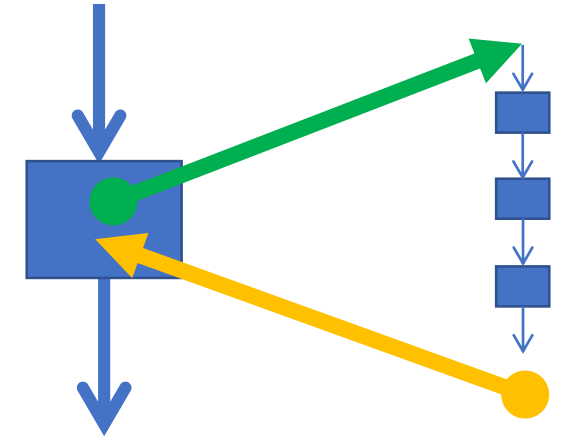
Conditionals



Loops



Calls (to Functions)



Quiz Procedures

Before Handout

Note: In the next quiz there will be assigned seats.

Pack up your notes and belongings and put your bookbag under your seat *not in front of you*.

Turn off cell phone and put away. Take off or turn around hats.

During Handout

Take one off the top and pass it down.

CLEARLY and LEGIBLY write name and PID.

If your row was handed quizzes and you did not get one, raise your hand.

During Quiz

Keep your eyes down, look to the heavens, or stare into a UTAs eyes.

Restroom emergency? Raise hand and give TA phone and quiz.

You will hand-in your quiz as you exit through the rear of the classroom. Get out your ONECard and take your stuff with you