

LC3	Name	Section Day(s)	Section start time
Component Language Core		Module Control of flow with if() and while()	
Work commenced on:		Work wrapped up on:	

Module Overview:

Computer programs **pay their rent** by making decisions about what to do (i.e. what lines of code to execute) based on variable values—meaning values that we don't know before the program runs.

User input, for example, comes from the user--not the programmer--and is therefore unknown before the program runs. Using if() and while()-controlled blocks allow us to instruct the computer: **"If the user says they're 21 years old, do not allow them to view any menu items that contain alcohol."** This is not only really handy, but is easy to do in Java!

Learning objectives

As you review each objective, pause to fill in any gaps in understanding you have

Mastery?	Objective	Type
	0. Plan a program with if() and while()-controlled blocks by writing an accurate flow diagram	Spiraling
	1. Implement if() and while()-controlled blocks in a program to accomplish something useful	Module-specific
	2. Nest an if()-controlled block inside a while()-controlled block to enforce program logic	Module-specific
	3. Use String.equals() to compare String values	Lang gen

Hamburger Contents: Check 'em off!

Assemble all of these items and slide them into this document folded *hamburger style*. Place on the right pocket of your folder, please.

Got it?	Description
	An accurate program flow diagram useful for coding
	Working code for the authentication machine project
	PRINTED code parsed with highlighting
	Any notes, sketches, or diagrams you used
	This hamburger – thoughtfully completed

System diagramming

You've practiced program flow diagramming to map out the logic of if() and while() controlled blocks. Transfer the essential if() and while() logic components from your overall program flow diagram into the space below.

The Heart of the Matter

- 1) What roles did the if() and while()-controlled blocks play in protecting your secret data?
- 2) Why do we call if() and while() close relatives? Please slow down and compose a thoughtful answer. (Feel free to type it and slide it into the hamburger.)