

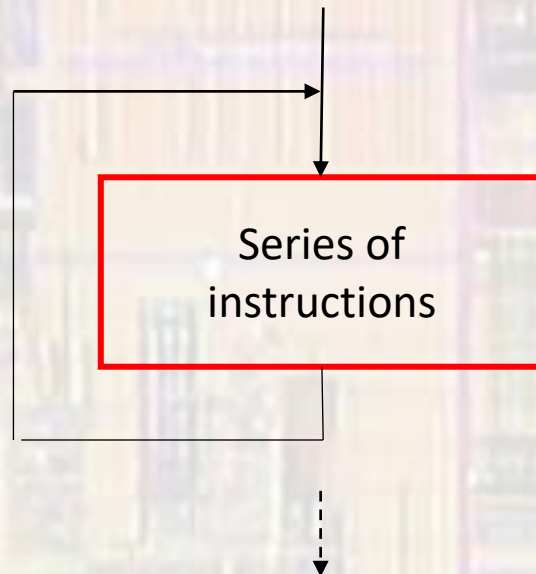
Repetition

Last updated 12/2/22

These slides outline repetition schemes

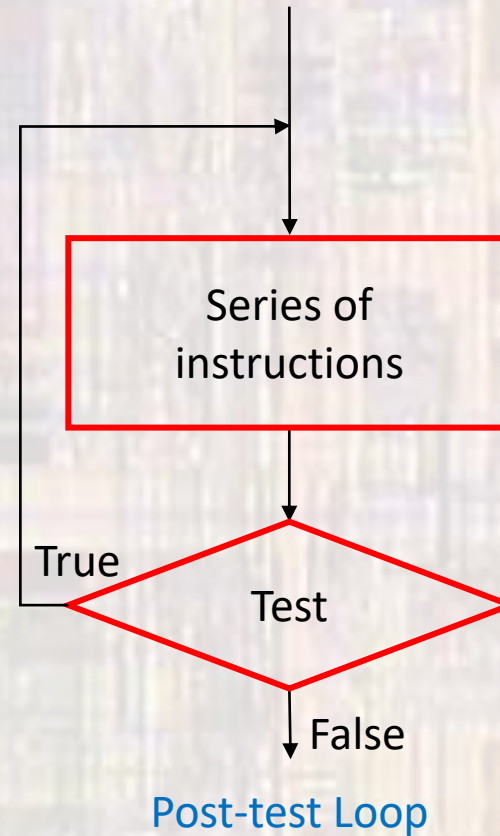
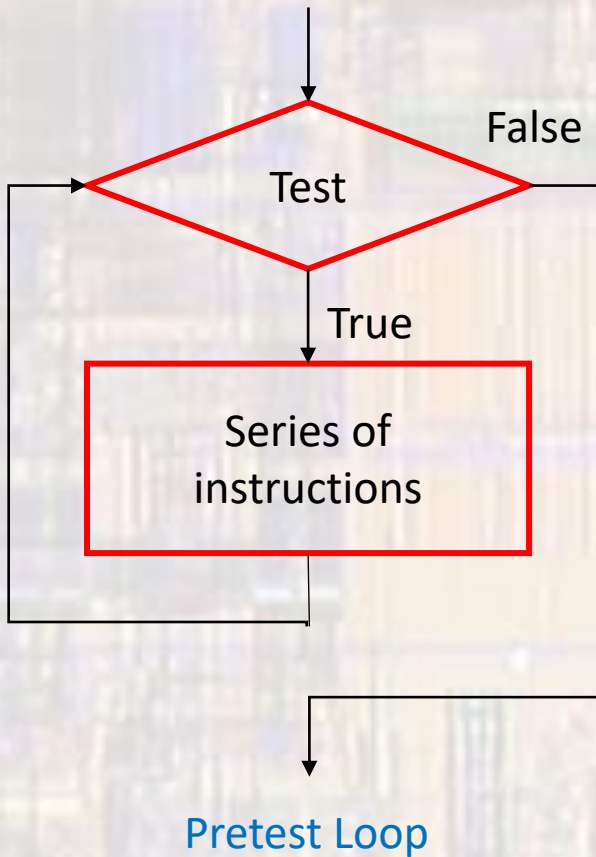
Repetition

- Repeat a series of instructions - loop
 - How many times
 - Under what conditions
- Test to determine if we are done



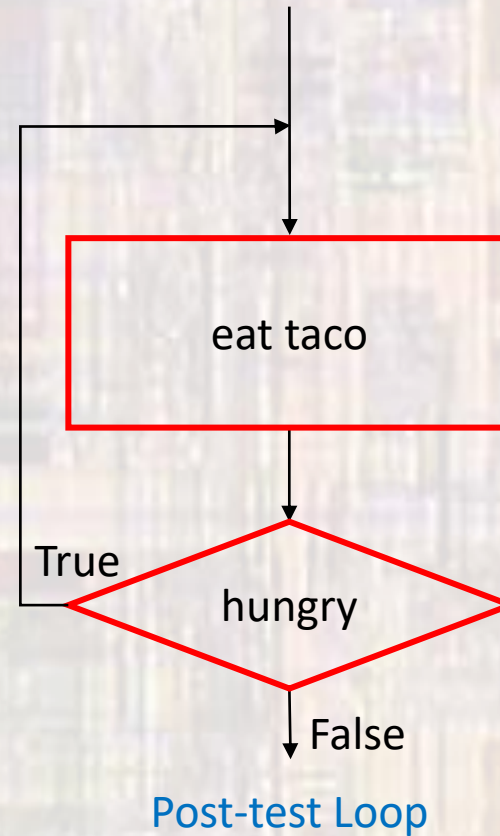
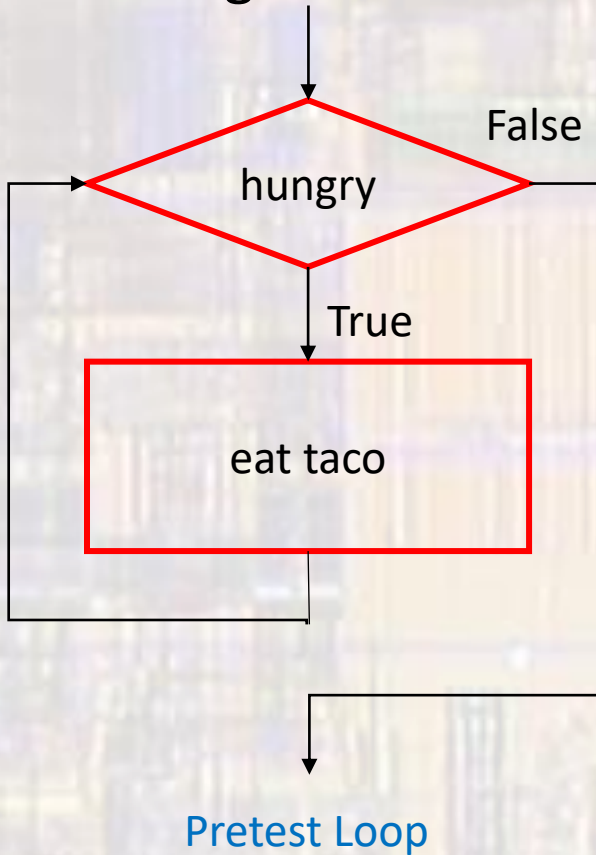
Repetition

- Loop Testing



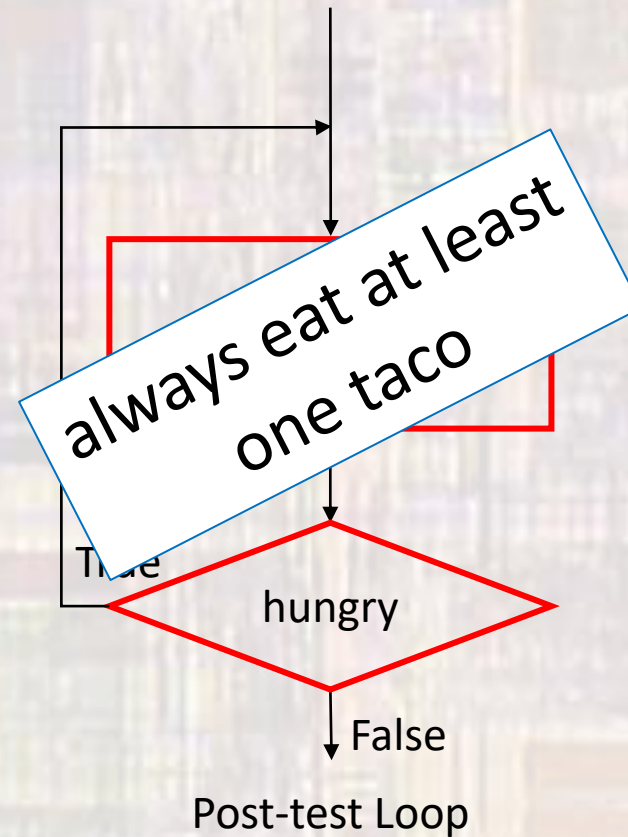
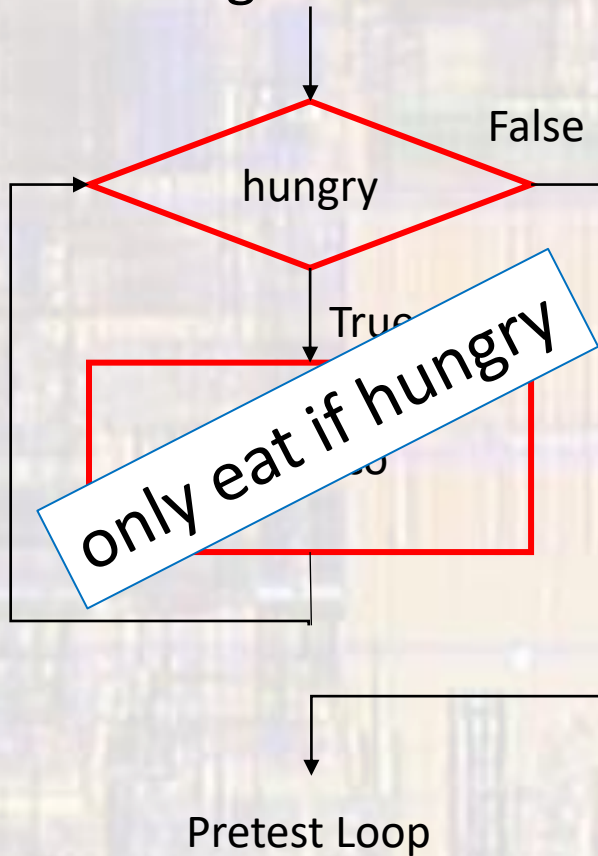
Repetition

- Loop Testing
 - Eating tacos



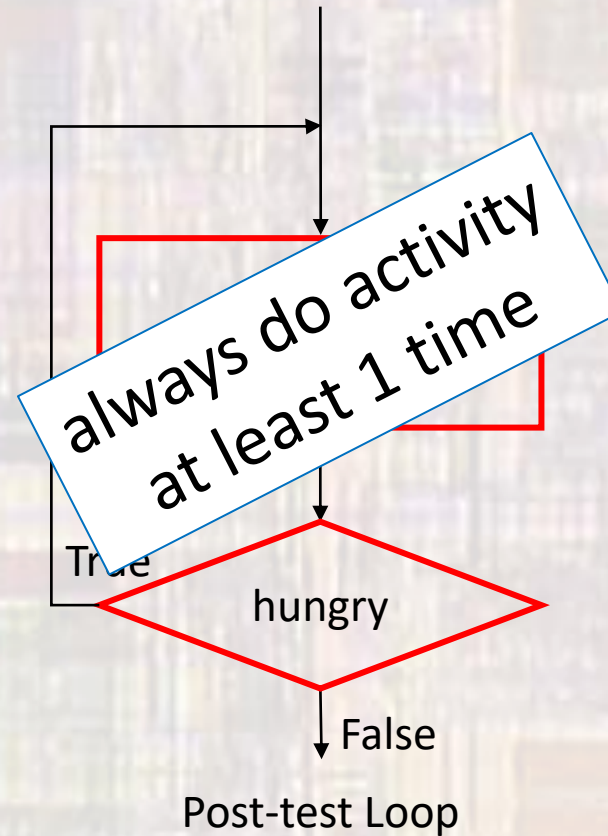
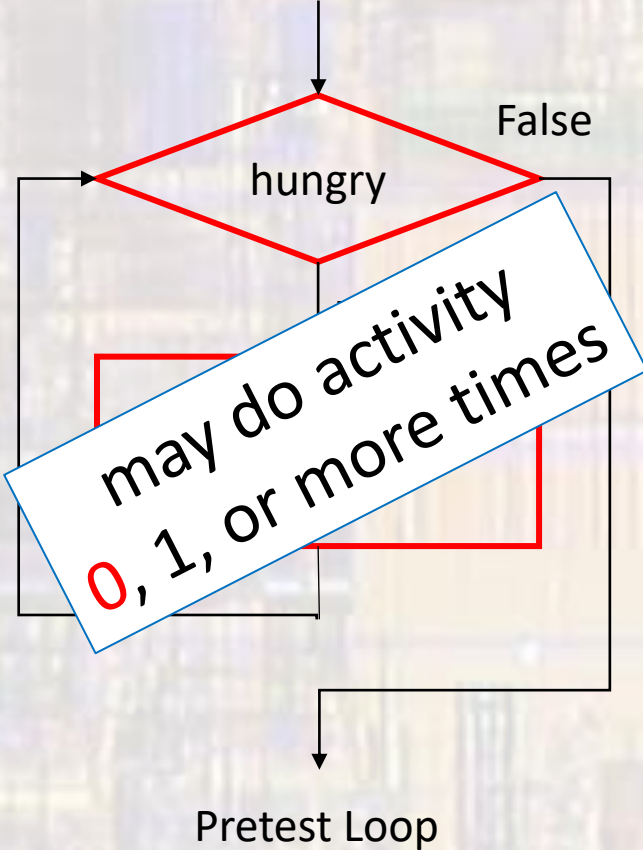
Repetition

- Loop Testing
 - Eating tacos



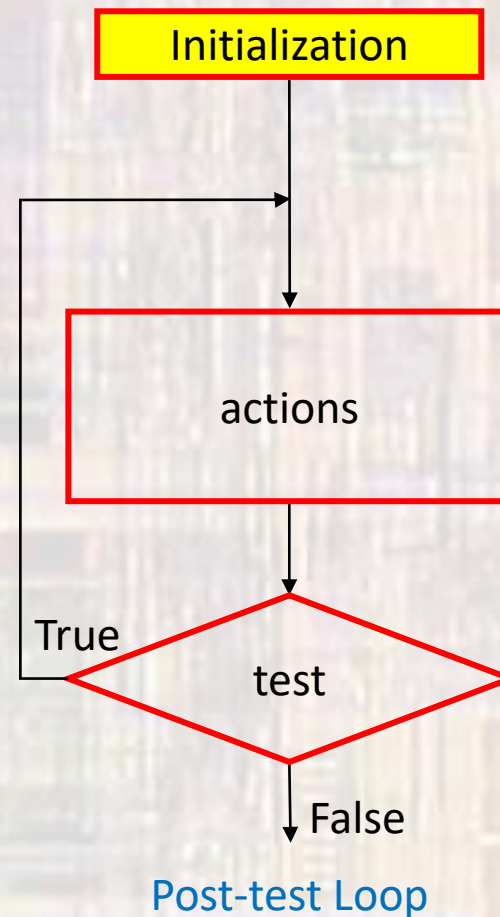
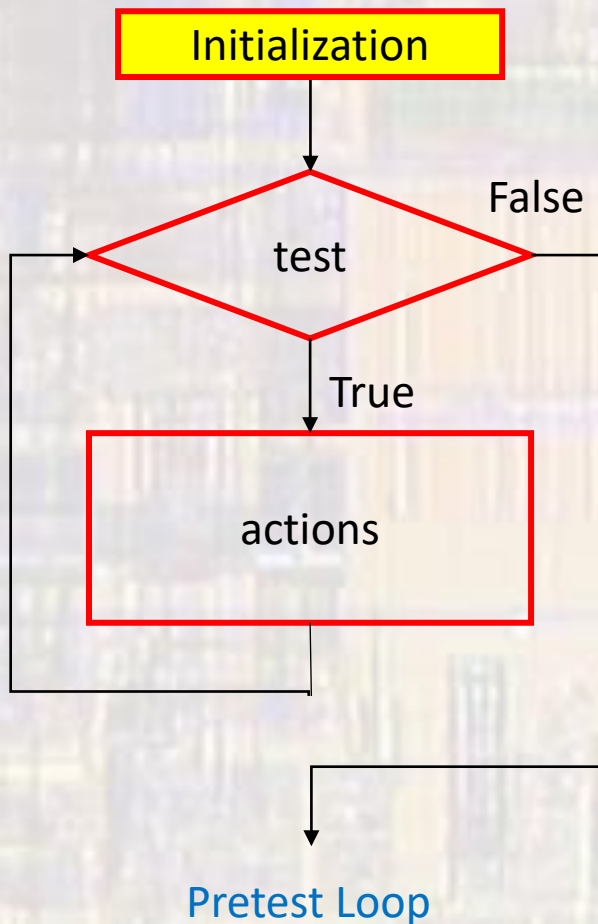
Repetition

- Loop Testing
 - Eating tacos



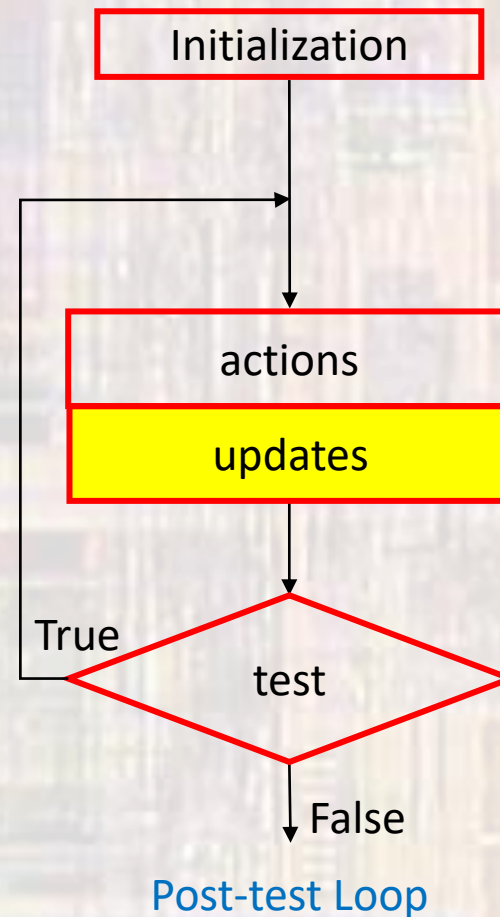
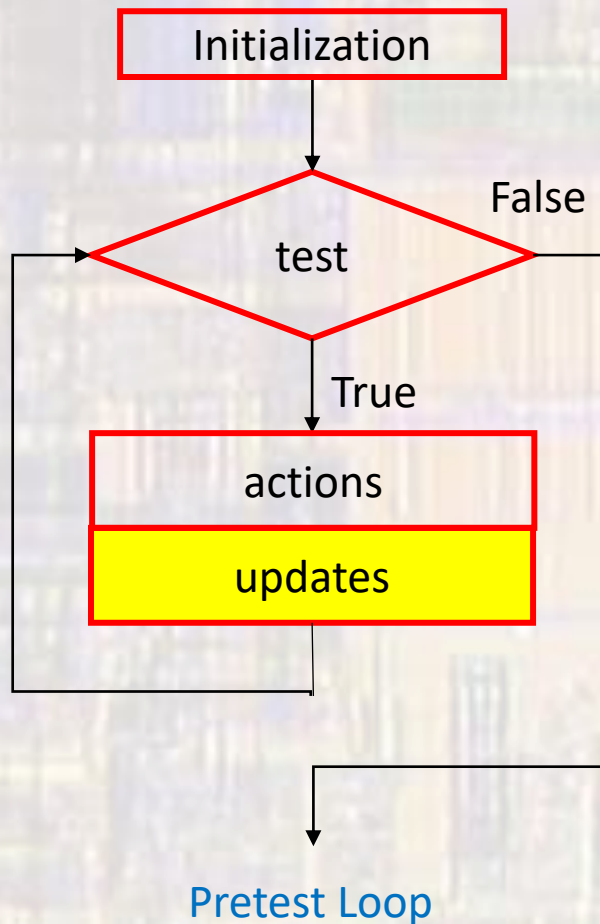
Repetition

- Loop Initialization
 - Initialize any required loop parameters (variables)



Repetition

- Loop Update
 - Update any required loop parameters (variables)



Repetition

- Loop Comparison

	Pretest	Post-test
Initialization	1	1
# of tests	$n+1$	n
Actions executed	n	n
Updates executed	n	n
Min iterations	0	1

Repetition

- Loops in C
 - while
 - pretest loop
 - for
 - pretest loop
 - do ... while
 - post-test loop