CompSci 94 Logic with Ifs, Nested Ifs October 3, 2024

if 2	BOTH Itrue AND Itrue I is true then			
	drop statement here			
else				
	drop statement here			

Prof. Susan Rodger

Announcements

• Assignment 3 due Tues. Oct 8

– Also fill out reflect form!

- Next QZ and Videos due Tuesday when class starts
 - They are up!

Q1. Review Nested IF

• What happens if the diningTable has width 1.7 and depth 1.0?

if 15(this.diningTable) getWidth > 21.5) is true then
if I (this.diningTable) getDepth > =1.0) is true then
(this.alien) say (table is larger than 1.5 square feet) add detail
else
(this.diningTable) say (thello) add detail
(this.diningTable) resize =1.2 add detail
else
(this.diningTable) say (Whoa) add detail
(this.diningTable) resize 2.0 add detail

3

Q2. Logic Review

- What are possible values of A and B – if A and B is True?
 - if **A or B** is True?
 - if **A or B** is False?

Q3. Consider this code – Nested Ifs How would you write it with ONE IF?

if	[[[[[[[[[[[[[[[[[[[[
	if Chis.alien isBehind (this.diningTable) add detail is true then
	this.alien serveFood
	else
	this.alien say No service today add detail
el	se
	this.alien say No service today add detail

Q4. What does bunny say?

_	
if	Image: Second structure Image: Second structure
	(this.bunny) say (first) add detail
el	lse
	if this.panda getHeight < this.bunny getHeight is true then this.bunny say freecond add detail else
	if I (this.bunn) getPaint + D RED I is true then
	this.bunny say third add detail
	🔅 🔅 else
	if <u>(this.bunny</u> getPaint) \neq <u>RED</u> is true then (this.bunny say (third) add detail else (this.bunny say (fourth) add detail
100 - E	

Bunny is red to start.



Q5. Bunny different. What does bunny say?

_	
if	Image: Second state sta
199	(this.bunny) say (first) add detail
el	lse
100	
	if L (this.panda) getHeight < E (this.bunny getHeight) is true then (this.bunny say (second) add detail)
	(this.bunny) say (second) add detail
188 - C	Selse Sels
	if I (this.bunny getPaint) I I CEREDITI is true then
	(this.bunny say (third) add detail
18 - C	🔅 🔅 else
	else (this.bunny getPaint = RED) is true then (this.bunny say (third add detail else (this.bunny say (fourth add detail)
188	

Bunny is green to start.



Q6. Give an example to make bunny say fourth

if [BOTH [[(this.bunny getPaint] == [RED] AND [(this.panda) getHeight] > [(this.bunny getHeight])
(this.bunny say first) add detail
else
if ↓ E this.panda getHeight ✓ E this.bunny getHeight ▼ is true then this.bunny say f second 1 add detail
this.bunny say second add detail
i else
if ↓ (this.bunny getPaint) ≠ RED I is true then (this.bunny say / third I add detail else (this.bunny say / fourth I add detail I)
Chis.bunny say / third add detail
🔅 🔅 else
this.bunny say fourth add detail

Class Today

• Nested Ifs, Logic – and/or/not



