

# Conditional Statements

Ed-Talk #3



What is a BOOLEAN variable?





# Boolean

TRUE

1

0

FALSE

- Type of Variable
- Only Two Values
- Used for Comparison
- Control Events in the Program





What is a conditional  
statement?



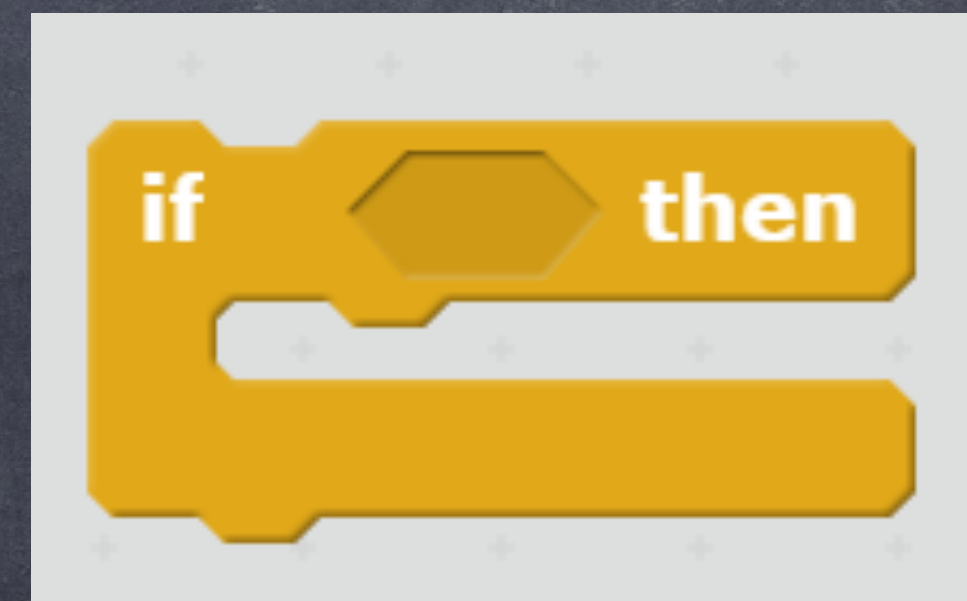


# IF / THEN Statement

- Checks **if** the condition is true
- **Then** completes the code



```
if (lives < 0) {  
    return "you lost";  
}
```

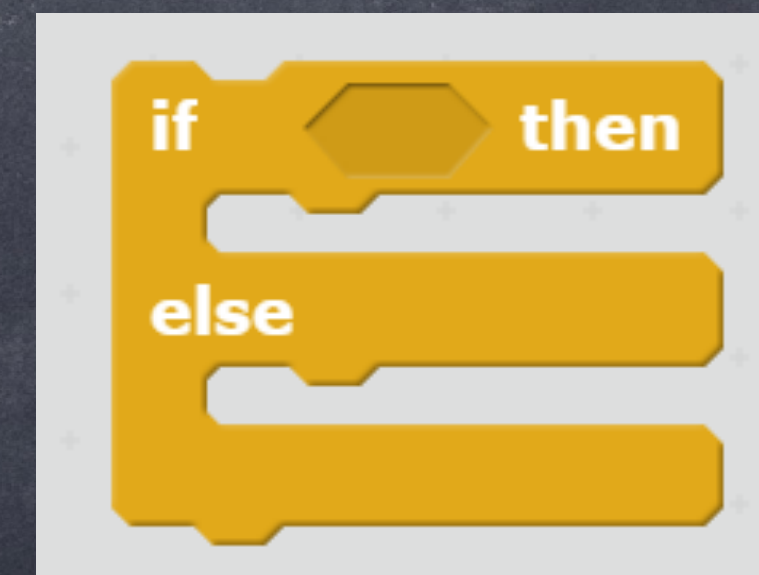




# IF / THEN / ELSE Statement

- Checks **if** the condition is true
- **Then** completes the code
- **Else** do a different action

```
if (lives < 0) {  
    return "you lost";  
} else {  
    return "keep playing";  
}
```





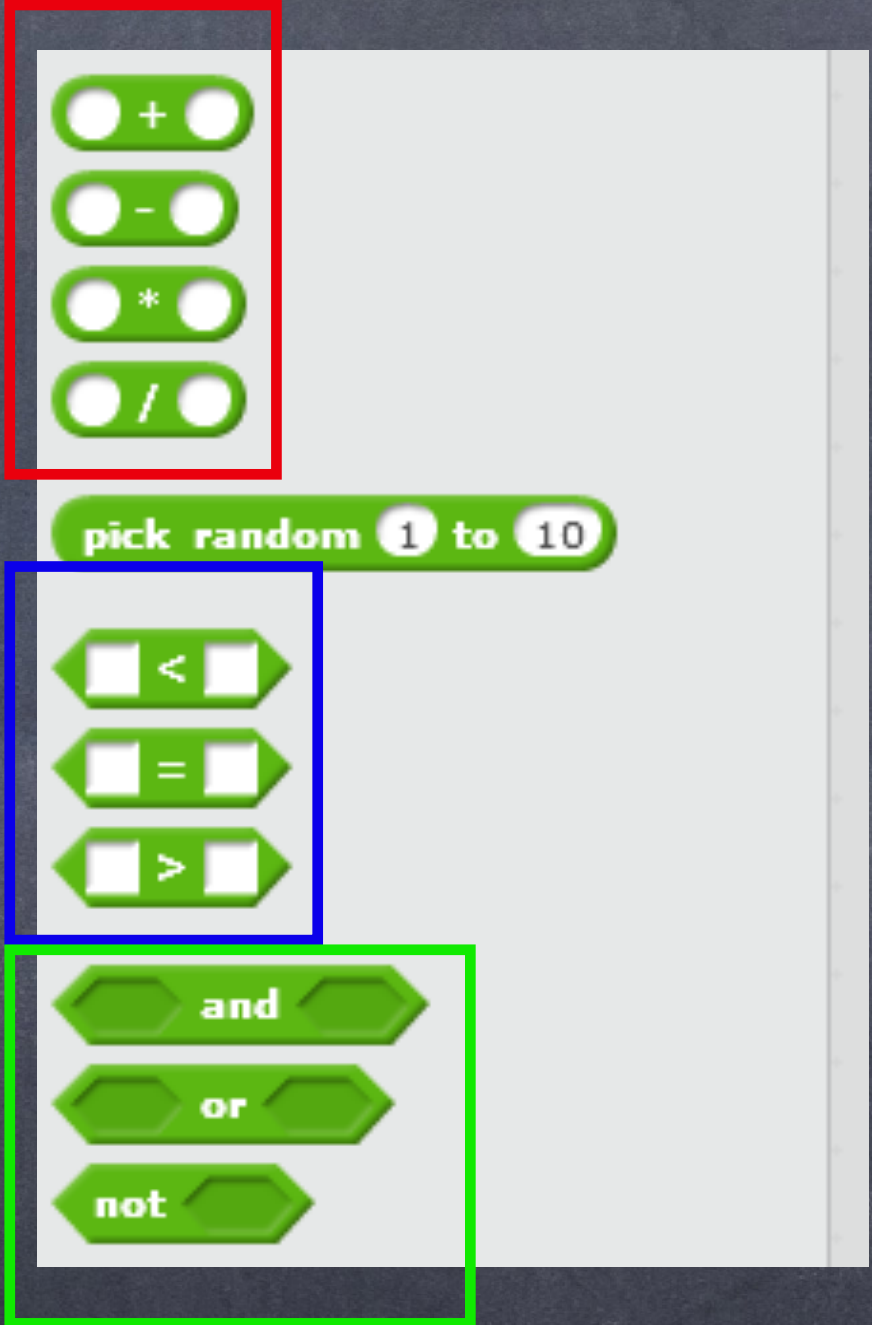
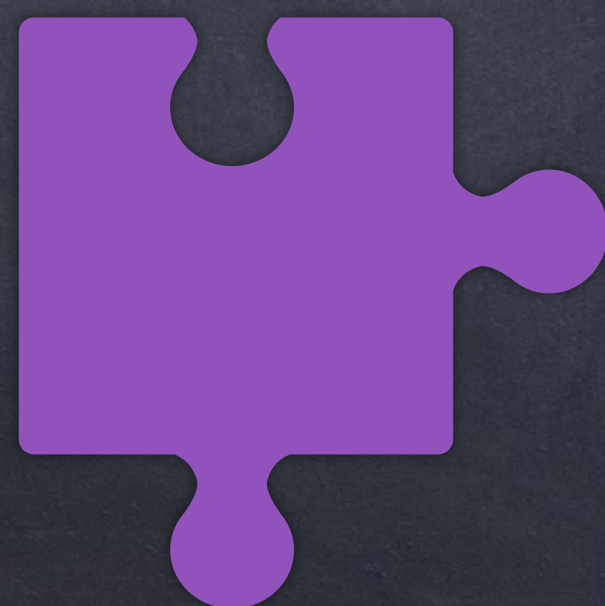
What is are operators?





# Operators

- Modify Variables
- Compare Variables
- Check Variables



Category	Operator	Name/Description	Example	Result
Arithmetic	+	Addition	3+2	5
	-	Subtraction	3-2	1
	*	Multiplication	3*2	6
	/	Division	10/5	2
	%	Modulus	10%5	0
	++	Increment and then return value	X=3; ++X	4
		Return value and then increment	X=3; X++	3
Logical	--	Decrement and then return value	X=3; --X	2
		Return value and then decrement	X=3; X--	3
	&&	Logical "and" evaluates to true when both operands are true	3>2 && 5>3	False
Comparison		Logical "or" evaluates to true when either operand is true	3>1    2>5	True
	!	Logical "not" evaluates to true if the operand is false	3!=2	True
	==	Equal	5==9	False
	!=	Not equal	6!=4	True
	<	Less than	3<2	False
	<=	Less than or equal	5<=2	False
String	>	Greater than	4>3	True
	>=	Greater than or equal	4>=4	True
	+	Concatenation(join two strings together)	"A"+"BC"	ABC