FOCUS LEARNING

Name:_____
Date:_____

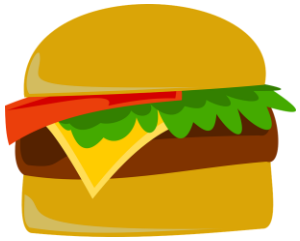
Python Level 1 - Red Badge 7 - Logical Operators

Skill 1: and Operator

```
wantCheese = True
wantBacon = True
if wantCheese == True and wantBacon == True:
    print("Bacon Cheese Burger")
elif wantCheese == True and wantBacon == False:
    print("Cheese Burger")
```

Hacker Skillz Version:

```
if wantCheese and wantBacon:
    print("Bacon Cheese Burger")
elif wantCheese and not wantBacon:
    print("Cheese Burger")
```



Why does this work?

Challenge:

A. Add two more cases to one of the versions of the hamburger code above, for only bacon and neither bacon or cheese.

Truth Table:

A	B	A and B
True	True	
True	False	
False	True	
False	False	

Skill 2: or Operator

```
wantCream = True
```

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```
wantSugar = False
if wantCream == True or wantSugar == True:
      print("Offer cream, offer sugar")
else:
      print("Don't offer either")
```

Challenges:

A. Try changing wantCream and wantSugar to all different combinations of True and False (first two lines). See how this changes your code.

B. Try Monkey Trouble on repl.it.

Bonus: Change your code to the HackerSkillz Version.

A	B	A or B
True	True	
True	False	
False	True	
False	False	

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Skill 3: not Operator

```
fiction = True
if not fiction == True:
      print("This is a true story")
else:
      print("This is a made up story")
```

A	not A
True	
True	
False	
False	

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Skill 4: Precedence

Rules:

not is stronger than **and**
and is stronger than **or**
always evaluate left to right
brackets can help!

Problem: Fill in the truth table to evaluate A and B or not C.

A	B	C			A and B or not C
True	True	True			
True	True	False			
True	False	True			
True	False	False			
False	True	True			
False	True	False			
False	False	True			
False	False	False			

A	B	C		not (A and B) or C
True	True	True		
True	True	False		
True	False	True		
True	False	False		
False	True	True		
False	True	False		
False	False	True		
False	False	False		