Clicker Questions for L06: Control Statements for 2017-01-31
Q1: Booleans

What is the output of the following code?

```python
a = "3.0"
b = (a == "3")
print(b)
```

A. True

B. False

C. 12

D. An Error

E. None of the above
Q2: Booleans

What is the output of the following code?

```python
a = 12.0
b = (a >= 12)
print(b)
```

A. True
B. False
C. 12
D. An Error
E. None of the above
Q3: Combining Comparisons

What is the result of the following code?

```python
>>> var = True
>>> 17 != 5 == var
```

A. True
B. False
C. 17
D. An Error
E. None of the above
What is the value of \texttt{var} at the end of the code?

\begin{verbatim}
var = 1
if(var < 0):
    var = var * 2
elif(var < +5):
    var = 5
else:
    var = -var
\end{verbatim}

A. -1  
B. 0  
C. +2  
D. +5  
E. Insufficient information
What is the output?

```python
x = 5
if x < 15:
    if x > 8:
        print('one')
    else:
        print('two')
if x < 10:
    print('three')
else:
    print('four')
```

A. one
   three
B. two
   three
C. three
   four
D. two
   four
E. None of the above
Q6: Nested conditions

- What is the Scratch equivalent?

```python
if val == 1:
    print("val maintains")
elif val == 0:
    print("val zeros")
elif val == -1:
    print("val flips")
```

A

B

C
Q7: Chaining conditionals

```python
def letter_grade(grade):
    
    Returns ..... grade : a numerical grade for a course
    
    if grade < 50 :
        return 'F'
    elif grade < 55 :
        return 'D'
    elif grade < 68 :
        return 'C'
    elif grade < 80 :
        return 'B'
    else :
        return 'A'
```

Which of the following is correct?.

A. `letter_grade(68)` returns 'C'
B. `letter_grade(49)` returns 'F' and `letter_grade(55)` returns 'D'
C. `letter_grade(68)` returns 'D'
D. `letter_grade(-20)` returns 'F' and `letter_grade(110)` returns 'A'
E. None of the above