**Operators-assignment**

1. Given the statements:
   * A = True
   * B = False
   * C = True  
     Evaluate the following:  
     **(A and B) or (not C and B)**
2. If X = False and Y = True, what is the result of:  
   **not(X or not Y) and (X or Y)**?

**Multiple Choice:**

1. If P = True, Q = False, and R = True, which of the following evaluates to True?  
   a. (P or Q) and (not R)  
   b. not (Q and R) or P  
   c. (P and not Q) or (Q and R)  
   d. not (P and R)
2. Given D = False, E = True, and F = True, what is the value of the expression?  
   **D or (not E and F) and (D or E)**  
   a. True  
   b. False  
   c. None  
   d. Invalid Expression

**Fill in the Blanks:**

1. Fill in the blanks to make the following statement True:  
   (\_\_\_\_ and True) or (False and not \_\_\_\_) = True.
2. If (A and not B) or (C and D) evaluates to False, which of the following **must** be False?  
   a. A  
   b. B  
   c. C  
   d. D

**Code Interpretation:**

1. What will the following Python code output?

A = True

B = False

C = True

result = A and (not B or C) and not (B and C)

print(result)

1. Consider the following pseudocode:

if (X and Y) or (not Z):

return True

else:

return False

What is the output if X = True, Y = False, and Z = False?