Q1 (15 points): What is the exact output of the following pseudocode segment?

FOR I from 1 to 4

FOR J from 1 to 4

PRINT((J-I) + "\t")

ENDFOR

PRINTLINE()

ENDFOR

Answer:

Q2 (15 points): Write pseudocode **while loop** to sum all the values between 2 integers (A & B, input by the user), including A and B, and print the resulting sum. A must be less than B, otherwise print 0.

Answer is in Pseudocode: □ C#: □ Java: □ C++: □

Q3 (20 points): What is the exact output of the following pseudocode segment?

METHOD MAIN

CALL myMethod (0,2)  
CALL myMethod (3,5)

CALL myMethod (6,7)

END MAIN

METHOD myMethod(A,B)  
BEGIN   
 WHILE (A < B)  
 PRINT(A + " ")  
 A ← A + 1  
 ENDWHILE  
 PRINTLINE();  
END myMethod

Answer:

Q4 (20 points): Write a method, called *PrintNumbers*, that prints out the following sequence of numbers. The method must use a **for-loop** to print the outputs.

*HINT: “To get started: what’s the pattern from number X to (X+1)?  Does it apply to the next pair of numbers?”*

8 12 18 26 36 48 62

Answer is in Pseudocode: □ C#: □ Java: □ C++: □

Q5 (20 points): Write a method, called *CheckLetter*. The method receives a letter as a parameter and returns whether the letter is a lowercase vowel (a, e, i, o, u) or not. Sample outputs are:

The entered letter is: a  
a is a vowel.

The entered letter is: b  
b is not a vowel.

Answer is in Pseudocode: □ C#: □ Java: □ C++: □