# AP COMPUTER SCIENCE PRINCIPLES – Control Statements Assignment

Directions: Answer each of the following questions by typing the correct answer in the space provided.

1. Explain the role of the variable in the header of a for loop.
2. Write a loop that prints your name 100 times. Each output should begin on a new line.
3. Assume that x is 3 and y is 5. Write the values of the following expressions:
   1. x ==y
   2. x > y -3
   3. x <= y -2
   4. x == y or x > 2
   5. x !=6 and y > 10
   6. x > 0 and x < 100
4. Explain how to check for an invalid input number and prevent it being used in a program. You may assume that the user enters a number.
5. Explain the role of the trailing else part of an extended if statement.
6. The variables x and y refer to numbers. Write a code segment that prompts the user for an arithmetic operator and prints the value obtained by applying that operator to x and y.
7. Write the outputs of the following loops:
   1. for count in range(5):

Print(count +1, end=” “)

* 1. for count in range(1, 4):

Print(count, end=” “)

* 1. for count in range(1, 6, 2):

Print(count, end=” “)

* 1. for count in range(6,1,-1):

Print(count, end=” “)