**WEEK 6 – Review Questions and**

**Programming Challenges Handout**

**Chapter: 4**

**Review Questions:**

* **What value will be stored in the variable t after each of the following statements executes?**

A) t = (12 > 1);\_\_\_\_\_\_\_\_\_\_1

B) t = (2 < 0);\_\_\_\_\_\_\_\_\_\_0

C) t = (5 == (3 \* 2));\_\_\_\_\_\_\_\_\_\_0

D) t = (5 == 5);\_\_\_\_\_\_\_\_\_\_1

* **Convert the following conditional expression into an if/else**

**statement.**

q = (x < y) ? (a + b) : (x \* 2);

if(x<y){

q = (a+b);

}else{

q = (x\*2);

}

* **Assume the variables x = 5, y = 6, and z = 8. Indicate if each of the following conditions is true or false:**

A) (x == 5) || (y > 3) true

B) (7 <= x) && (z > 4) false

C) (2 != y) && (z != 4) true

**Programming Challenges:**

* **Software Sales**

A software company sells a package that retails for $99. Quantity discounts are given according to the following table.

**Quantity Discount**

10–19 20%

20–49 30%

50–99 40%

100 or more 50%

Write a program that asks for the number of units purchased and computes the total cost of the purchase.

***Input Validation****:* ***Decide how the program should handle an input of less than 0.***