**COMPUTER SCIENCE II WEEKLY QUIZ 02/10/2017**

**EACH QUESTION BELOW IS WORTH 10 POINTS. PLEASE ANSWER CLEARLY IN THE SPACE PROVIDED.**

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1. What is a conditional statement?

A Conditional statement is a piece of code that will execute only if the circumstances in the controlling condition are met.

1. Review the code sample below. What is it? What is it going to do?

**if (a == b) { if (b != c) { if (c == d) { if (d != e) { alert(a);}}}}**

This is an IF statement. This will execute an alert containing the variable a IF everything equals each other.

1. Wednesday’s lab project asked you to create a program to compute a student GPA and to display the grade on the screen. List all of the major programming components required that were required for this assignment.

First I made an array containing the number grades. Then I made and IF statement that says IF avg <60, display the letter grade F. And so on for each letter grade.

1. Describe the difference between the DO/WHILE loop and the other types of loops.

The DO/WHILE loop is a variation of the WHILE loop. Unlike in other loops, the code is executed at least once and is re-executed each time the condition evaluates to TRUE.

1. You want the program to give the user 20 seconds to enter their quiz response. To accomplish this you would use the WHILE loop. To make sure that the response is valid you would use the DO/WHILE loop instead.
2. What is the main benefit of using conditional statements in computer programming?

The main benefit of using conditional statements is it will make the outcome/result more accurate.

1. How is a nested conditional statement different from other conditional statements?

Nested conditional statements are when you combine conditional statements if there is more than one possible condition to be evaluated.

1. What is the benefit of using the first approach listed in the previous question?

The benefit of using nested conditional statements is you can run the program as many times as you want.

1. Describe the three types of conditional statements covered in class this week.

The three types of conditional statements covered are IF statements, Nested IF statements, and IF/ELSE statements. In an IF statement, the code will only execute IF the condition defined in the Boolean statement is TRUE. Nested IF statements are when you combine conditional statements if there is more than one possible condition to be evaluated. As a result the code will run only if the specified combination of conditions is met. And lastly, IF/ELSE statements are when you execute one set of code if the condition is TRUE and another if the condition is FALSE.

1. Assuming that x=1, y=-1 and z =1, what is the code below going to do?

**if (z == x) { if (y != z) {alert(x, y, z);}}**

This will execute an alert, saying 1, -1, 1