**Midterm Exam Corrections**

Intro. C++ Test 1A

Question 2 - What will the following segment of code output?    
Assume the user enters a grade of 90 from the keyboard.   (Hint:  The first if-statement is legal but very short.).

Answer: You failed the test!

You passed the test!

Why missed:

Question 5 - Input values should always be checked for what three common things?

|  |  |
| --- | --- |
| Correct Answer: | Correct  appropriate range, reasonableness, possible division by zero |

Why I missed: I did not remember seeing this in the book, took my best guess and was off on all three things.

Answer found: Page 195 – input validation. Section 4.11.

Question 6 - What will the following code display?

What will the following code display?  
  
https://dmacc.blackboard.com/courses/1/201801_CIS161_12131/ppg/pearson/tm/soccs8g/f9g1q32g1.gif

Answer: 6

Why: I missed this because when the increment operator is postfix it only adds after this number would be displayed, so the correct answer is 6. If it were written ++number I would have been correct with my answer of 7.

Found: Increment operator. Section 5.1 page 233.

Question 7 - True/False: A function's return data type must be the same as the function's parameter(s).

I selected TRUE when I should have selected FALSE. Pretty sure I knew this but must have buckled under the pressure, so to speak. You can return a different data type as seen in section 6.8, page 333. For instance, the function could have two integers as the parameters, but return a double after, let’s say, adding the two integers and dividing by two to get an average.

Question 9 - Assuming **datafile** is a file stream object, what is the statement that would close that file stream?

|  |  |
| --- | --- |
| Selected Answer: | inputFile.close("datafile"); |
| Correct Answer: | Correct  dataFile.close(); |

I selected wrong, I knew the correct answer had “close” in it but was unsure which form the statement took. Answer can be found on page 274, Loops and Files, section 5.11, program 5-15.

Question 10 - What is the value of cookies after the execution of the following statements?

I ran out of time on this test, for some reason I thought a pop up of some sort would alert me when time was running out. There is apparently a warning of some sort, but I did not see it.

Correct answer: 2

38 % 4 leaves a remainder of 2.

Answer can be found on page 64, section 2.14 Arithmetic Operators.

**Intro. C++ Test 1B**

Question 1 - Assuming that all the variables are initialized correctly, fill-in-the-blank to end the loop when a -1 is entered:  
(only include one line for the BLANK)

|  |  |
| --- | --- |
| Selected Answer: | !(points == 'a-1') |
| Correct Answer: | Correct  points != -1 |

I cannot find where this is stated in the book, looked through section 4.1, relational operators. Seems like the answer is stating points is not equal to -1. Is that what the question asked for?

Question 2

|  |  |
| --- | --- |
| Selected Answer: | This line of code is a function prototype.  A function prototype eliminates the need to place a function definition before all calls to the function. |
| Correct Answer: | Correct  It is called a function prototype and this one sets up for a function called anotherFunky with one integer parameter that returns no value to the main program when it is used. |

Answer can be found in sections 6.3, 6.4 and 6.5, pages 315-323.

Question 4 – What is wrong with the nested loop.

|  |  |
| --- | --- |
| Selected Answer: | int student should start at 0 example below:  for (int student = 0; test <= numStudents; student++) |
| Correct Answer: | Correct  Remove student = student + 1; change total = 1; to total = 0; |

Still a little unsure what the problem is here on this one.