

CSCI 1370

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The point of these exercises is to allow you to evaluate whether you have learned the material from the past week, and to direct you in additional studying outside of class. These are exactly the types of questions that will show up on tests. My advice is to figure it out on paper, using your book or other resources, and then verify your answer by running the code. If you really want to learn the material, try variations and make sure you understand why the behavior changes the way it does.

Review exercises: conditional execution

1. Complete the following program by writing C++ statements that correspond to the description in each comment in the code. Make sure all output to the screen has newlines after it.

```
#include <iostream>
#include <string>
using namespace std;

int main()
{
    // declare a variable to hold a character and initialize it
    // to the letter 'H'

    // print "The value of the variable is <variable>"

    // prompt the user to enter a value

    // store whatever character the user types in your variable

    // if the user typed 'W' print "Excellent. "
    // otherwise print, "No, you fool! "

    return 0;
}
```

2. Given an integer variable *score*, write C++ statements to set the value of a string variable *output* using an if/else tree and following these rules (not necessarily in this order):

If this is the case...	...return the string
Score is less than 5	"Pathetic"
Score is higher than 100	"You lie"
Score is 20 or more	"Awesome"
Score is at least 5, but less than 20	"Solid"
Score is a negative number	"Okay, nevermind"

3. Given integer variables *a*, *b*, *c* and *d*, write an expression that evaluates to true if *a* is greater than *b*, which is greater than *c*, which is greater than *d*.
4. Given the string variables *name1* and *name2*, write an expression that evaluates to true if *name1* comes before *name2* in alphabetical ordering.
5. Given the floating point variables *price*, *tax* and *balance* and the boolean variable *suspended*, write C++ statements that print out the message "Thank you for your business" if *balance* is greater than or equal to the sum of *price* and *tax* and *suspended* is false, "Insufficient funds" if *balance* is less than the sum of *price* and *tax* and *suspended* is false, or "Return our book, deadbeat" if *suspended* is true.