Given the following, be able to determine the output based on any input:

Consider the following statements.  
  
int score;  
string grade;  
  
if (score >= 65)  
  grade = "pass";  
else  
  grade = "fail";

Suppose found = true and num = 6. The value of the expression (!found) || (num > 6) is \_\_\_\_\_false\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

When a logical expression is evaluated and based on the first expression, the answer is known the computer doesn’t evaluate the second expression. This is called \_\_short-circuit evaluation\_\_\_\_\_.

To make sure that each case in a switch statement only executes the code that goes with that case, the keyword \_\_\_\_break\_\_\_\_\_ needs to be the last command within the block of code for the case.

What is the output of the following code?  
  
char lastInitial = 'S';  
  
switch (lastInitial)  
{  
case 'A':  
  cout << "section 1" <<endl;  
  break;  
case 'B':  
  cout << "section 2" <<endl;  
  break;  
case 'C':  
  cout << "section 3" <<endl;  
  break;  
case 'D':  
  cout << "section 4" <<endl;  
  break;  
default:  
  cout << "section 5" <<endl;  
}

A couple more like the one above.

What happens to the code below? How would you fix it?

for(int x=0; x <5; x++)~~;~~

cout << “x is “ << x << endl;

What is the output of the following C++ code?  
  
count = 1;  
num = 6;  
while (count < 8)  
{  
  num = num - 1;  
  count++;  
}  
cout << count << " " << num << endl;

What is the output? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Another while loop to evaluate.

Given a list of Fibonacci numbers in order, what is the next one in line: 0,1,1,2,3,5, \_\_\_8\_\_\_\_\_\_.

Top decision loops evaluate the expression when?

The conditions are met

\_\_\_\_\_\_\_\_reference\_\_\_\_\_\_\_\_\_\_\_\_ parameters are useful in three situations:  
  
• When the value of the actual parameter needs to be changed  
• When you want to return more than one value from a function  
• When passing the address would save memory space and time relative to copying a large amount of data

What type of functions and parameters would you use if your function needed to return more than one value?

Value-returning functions

There are three requirements for creating and using functions. What are they and where in the code are they placed?

Function prototype, call to function, function definition

What is the symbol used to indicate a parameter is a reference parameter?

Given the following function:

int strange(int x, int y)  
{  
if (x > y)  
return x + y;  
else  
return x – y;

}  
  
what is the output of the following statement?  
  
cout << strange(4, 5) << endl;

The function main is always compiled first, regardless of where in the program the function main is placed.

(false)

The output off the following command would be:

pow(3.0, 2.0) + 5

Given a list of function prototypes, choose the one that is written correctly. Look for value or void, parameters and ;

Define a data type.

The domain of all values operations that can be preformed

Define an algorithm.

A step by step solution to a problem in a finite number of steps or time

Name two advantages of creating your own functions.

Code reusability and simplicity

How many times will the inner loop execute? NOTE: You do not need to calculate this – just list the different levels – x \* y \* z

int times = 1;

int main()

{  
   for (int x = 1; x <=8; x++)  
      for (int y = 1; y <= 8; y++)  
         for (int z = 1; z <= 8; z++)  
            cout << times++ << endl;  
  
return 0;  
}

 8\*8\*8

Explain the difference between a do while loop and a while loop. 6 points make sure you list everything!

Do while loop is bottom decision and it will run at least 1 time

Explain a formal parameter.

Explain an actual parameter.

List the 5 steps required to use files (either input or output – don’t need to explain both)

1. Include fstream header
2. Declare file steam variables
3. Associate the file stream variables with the input/output sources
4. Use the file stream variables with >>, <<, or other input/output functions
5. Close the files