Class Activity 5 – Chapter 5

Name_____

1) Text book(Exam Preparation Exercise)/Chapter5 & Question5:

a. b. c. d. e. f. g.

2) Text book(Exam Preparation Exercise)/Chapter5 & Question10:

3) Text book(Exam Preparation Exercise)/Chapter5 & Question12:

4) Text book(Exam Preparation Exercise)/Chapter5 & Question13:

5) Text book(Exam Preparation Exercise)/Chapter5 & Question14:

6) Text book(Exam Preparation Exercise)/Chapter5 & Question15:

True or false?

7) If the code fragment

```
if (a >= 10)
if (a < 20)
a = a + 2;
else
a = a + 1;
```

is indented according to the manner in which it is executed, the correct indentation is

```
if (a >= 10)
    if (a < 20)
        a = a + 2;
else
        a = a + 1;
```

8) Use the Unix compiler output below to identify the 3 errors.

syn4.cxx:18:16: warning: multi-character character constant
syn4.cxx: In function âint main()â:
syn4.cxx:14: error: âelseâ without a previous âifâ
syn4.cxx:16: error: ânummâ was not declared in this scope

```
//If-Then-Else Statements
#include <iostream>
using namespace std;

int main()
{

  int num = 10;
  if(num >= 10 && num <= 100);
    if(num > 11)
      cout << num + 1 << endl;
    else
      cout << (num - 1) << endl;
  else
    if(num == 0)
      cout << numm << endl;
    else
      cout << 'BUG!' << endl;

  return 0;
}
```

9) What is the output of the following program?
If "?" is replaced with the following number what is the output.

15, 7, 5, 50

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

int main()
{
      int num = ?;
      if (num >= 10 && num <= 100)
        if (num > 50)
          cout << num + 1 << endl;
        else
          cout << num - 1 << endl;
      else
```

```
        if (num == 5)
          cout << num << endl;
        else
          cout << "OK!" << endl;

      return 0;
}
```

Output:

_____

_____

_____

_____

```
#include <iostream>
#include <fstream>
#include <iomanip>

using namespace std;

const int MAXNUM = 100;
const int MINNUM = 0;

int main()
{
   ofstream outFile;
   ifstream inFile;

   outFile.open("out.data");
   inFile.open("in.data");

   outFile.setf(ios::fixed);
   outFile.precision(2);

   int num1, num2, max;
   float avg;

   outFile << "~~< Two Numbers >~~" << endl << endl;
   outFile << "Num1" << setw(10) << "Num2" << setw(10) << "MAX"
           <<  setw(10) << "AVG" << endl;
   outFile << "----" << setw(10) << "----" << setw(10) << "---" << setw(10)
```

```
            << "---" << endl;

   inFile >> num1 >> num2;

   outFile << num1 << setw(10) << num2;

   if((num1 >= MINNUM && num1 <= MAXNUM) && (num2 >= MINNUM
      && num2 <= MAXNUM))
   {

     if (num1 >= num2)
       max = num1;
     else
       max = num2;

     avg = float(num1 + num2)/2.0;

     outFile << setw(11) << max << setw(13) << avg << endl << endl;

    }
    else

    outFile << setw(20) << "*** Invalid data" << endl << endl;

    outFile << endl << "*< end >*" << endl;

   return 0;
}
```