Class Activity 6 – Chapter 6

- 1) Text book(Exam Preparation Exercise)/Chapter6 & Question4:
- a.
- b.
- c.
- d.
- <u>.</u>
- f.
- g.
- h. i.
- 2) Text book(Exam Preparation Exercise)/Chapter6 & Question5:
- 3) Text book(Exam Preparation Exercise)/Chapter6 & Question6:
- 4) Text book(Exam Preparation Exercise)/Chapter6 & Question7:

5) True or false?

The termination condition for the following while loop is loopCount > 9.

```
while (loopCount < 9)
{
    cout << loopCount << endl;
    loopCount++;
}</pre>
```

6) Multiple Choice

What is the output of the following code fragment?

```
n = 1;
while (n < 5)
{
    cout << n << ' ';
    n++;
}</pre>
```

- a) 1 2 3 4 5
- b) 1 2 3 4
- c) 1 1 1 forever
- d) 2 3 4 5
- e) 2 3 4 5 6

7) Use the Unix compiler output below to identify the 1 errors.

```
syn5.cxx: In function âint main()â:
syn5.cxx:17: error: expected `}' at end of input
#include <iostream>
using namespace std;
int main()
int x = 0;
int a, b;
 while (a \ge 0)
  x++;
  a = x;
  b = a + x;
 cout << x << ' ' << a << ' ' << b;
return 0;
}
8) What is the output of the following program? ON TEST
Assume this is the "in" is : 4 2 5 2 -1 3 6
#include <fstream>
#include <iomanip>
using namespace std;
int main()
  ifstream inFile;
  inFile.open("in");
  ofstream outFile;
   outFile.open("out");
  int count = 0;
  int sum = 0;
  int num;
  float avg;
   bool ok;
```

```
ok = true;
      while (ok)
         inFile >> num;
         if (num < 0)
              ok = false;
         else
         {
              count++;
              sum += num;
              outFile << count << " " << num << " " << sum << endl;
         }
       }
      outFile << "AVG is: " << sum/count << endl;
      return 0;
    }
   Output:
//While loop Chap6I
#include <iostream>
#include <fstream>
#include <iomanip>
using namespace std;
int main()
  ofstream outFile;
  ifstream inFile;
  outFile.open("out.dat");
  inFile.open("in.dat");
  outFile.setf(ios::fixed);
  outFile.precision(2);
  float examScore, avg;
  float sumOfScore = 0.0;
  int count = 0;
  float max = 0.0;
  float min = 100.0;
```

```
outFile << "*** Exam Report ***" << endl;
  outFile << endl;
  inFile >> examScore;
  while(inFile)
    if((examScore \ge 0) \&\& (examScore \le 100))
     outFile << examScore << endl;
      sumOfScore = sumOfScore + examScore;
     count = count + 1;
     if(examScore > max)
       max = examScore;
     if(examScore < min)
       min = examScore;
    else
     outFile << examScore << " Invalid exam" << endl;
    inFile >> examScore;
  }
  avg = sumOfScore/count;
  outFile << endl;
  outFile << "Exam Max: " << max << endl;
  outFile << "Exam Min: " << min << endl;
  outFile << "Exam Avg: " << avg << endl;
  outFile << endl;
  outFile << "< end >" << endl;
  return 0;
in5.dat:
77
-60
88
99
101
```

}

out5.dat:
*** Exam Report ***

77.00

-60.00 Invalid exam

88.00

99.00

Invalid exam 101.00

Exam Max: 99.00 Exam Min: 77.00 Exam Avg: 88.00

< end >