Revision Questions | Week 05

These are self-revision questions, to help you track if you are understanding the weekly course content.

You should FIRST answer these questions using "pen-and-paper". Only after this should you test your answers by writing and compiling programs.

1. What are the three standard streams used for input/output in C++, and what is their purpose?
2. What is the purpose of the `istream` C++ class? Give some examples of an `istream`.
3. What operator is used for writing to an output stream?
4. How does the input operator separate values?
5. When reading from a file, what must be checked? How can this be done?
6. The following short C++ program is incomplete. It's purpose is to from all of the lines from a text file and display them to the screen. Fill in the missing details

```cpp
// Add #include's

#define EXIT_SUCCESS    0

// Are using statements required?

int main(void) {
    string filename("file.txt");
    std::ifstream inFile;

    // Open the file

    if(inFile.good()) {
        while (!inFile.eof()) {
            string line;

            // Read the entire line

            cout << "Read: " << line << endl;
        }
    }

    // What should go here?

    return EXIT_SUCCESS;
}
```

7. Describe the concept of a lexicographical order.
8. What will be the value of each variable at the end of the following code snippet

```cpp
std::string hello("hello");
std::string second = hello + "world!";
hello[1] = 'a';
bool compare = hello == "hello";
bool order = hello < second;
```

9. What should be the definition of the `main` function, if the program wishes to use command line arguments?
   (a) Describe the meaning of the `argc` parameter
   (b) Describe the purpose of the `argv` parameter