35 Lecture - CS201

Important Subjective

1. **What is a stream in C++?**
   Answer: A stream is an abstraction that represents a sequence of data flowing between a program and an input/output device.

2. **What are the three types of streams in C++?**
   Answer: The three types of streams in C++ are input streams, output streams, and error streams.

3. **What is the purpose of using stream manipulators in C++?**
   Answer: Stream manipulators are used to modify the output formatting of streams, such as setting the width or precision of output data.

4. **What is the difference between text mode and binary mode when opening a file stream in C++?**
   Answer: Text mode is used for reading and writing text files, while binary mode is used for reading and writing binary files.

5. **What is the difference between cin and getline() in C++?**
   Answer: cin is used to read input data from the console, while getline() is used to read a line of input data from a file.

6. **How can you open a file for writing in C++?**
   Answer: You can open a file for writing in C++ by calling the open() function with the mode parameter set to "out" or "out | trunc".

7. **What is the purpose of the flush() function in C++?**
   Answer: The flush() function is used to clear the output buffer and ensure that any pending output data is written to the output device.

8. **How can you check if an input operation has failed in C++?**
   Answer: You can check if an input operation has failed by calling the fail() function on the input stream.

9. **How can you read data from a stringstream in C++?**
   Answer: You can read data from a stringstream in C++ by calling the str() function to get the stream's internal string buffer, and then using standard string operations to extract the data.

10. **How can you write data to a file in binary mode in C++?**
    Answer: You can write data to a file in binary mode in C++ by opening the file stream with the mode parameter set to "out | binary", and then using the write() function to write data in binary format.