

# 38 Lecture - CS201

## Important Subjective

- 1. What is a user-defined manipulator in C++?**  
Answer: A user-defined manipulator is a function that modifies the output of a stream in a customized way.
- 2. How are user-defined manipulators defined in C++?**  
Answer: User-defined manipulators are defined as global functions outside of any class.
- 3. What is the syntax for calling a user-defined manipulator?**  
Answer: The syntax for calling a user-defined manipulator is to use the insertion operator (<<) followed by the manipulator function name.
- 4. What is the purpose of std::setw() function in C++?**  
Answer: The std::setw() function is used to set the width of the output field.
- 5. What is the return type of a user-defined manipulator function in C++?**  
Answer: The return type of a user-defined manipulator function is ostream&.
- 6. How can we define a manipulator that sets the precision of floating-point values in C++?**  
Answer: We can define a manipulator that sets the precision of floating-point values using the std::setprecision() function.
- 7. What is the purpose of the std::setfill() function in C++?**  
Answer: The std::setfill() function is used to set the fill character of the output field.
- 8. What is the purpose of std::left and std::right manipulators in C++?**  
Answer: std::left and std::right manipulators are used to set the alignment of the output field to the left or right, respectively.
- 9. Can we chain multiple user-defined manipulators together in C++?**  
Answer: Yes, we can chain multiple user-defined manipulators together using the insertion operator (<<).
- 10. What is the header file that must be included to use user-defined manipulators in C++?**  
Answer: The header file that must be included to use user-defined manipulators in C++ is <iomanip>.