## 18 Lecture - CS304

### **Important Subjective**

#### 1. What is the self-assignment problem?

Answer: The self-assignment problem is a programming issue that occurs when an object is assigned to itself, leading to undefined behavior or data corruption.

#### Why is it important to handle self-assignment in the assignment operator?

Answer: Proper handling of self-assignment in the assignment operator is important to avoid undefined behavior and ensure the proper functioning of the program.

#### What are some potential issues that can arise from self-assignment?

Answer: Some potential issues that can arise from self-assignment include data corruption, memory leaks, and undefined behavior.

#### How can self-assignment be checked in the assignment operator?

Answer: Self-assignment can be checked in the assignment operator by comparing the address of the object being assigned to the address of the current object.

#### What is a common technique for handling self-assignment in the assignment operator?

Answer: A common technique for handling self-assignment in the assignment operator is to check if the object being assigned is the same as the original object before performing the copy.

#### How can the self-assignment problem be avoided?

Answer: The self-assignment problem can be avoided by properly implementing the assignment operator to handle self-assignment.

#### What is the purpose of handling self-assignment in the assignment operator?

Answer: The purpose of handling self-assignment in the assignment operator is to prevent undefined behavior and ensure the proper functioning of the program.

# Why is memory management important when handling self-assignment in the assignment operator?

Answer: Memory management is important when handling self-assignment in the assignment operator to avoid memory leaks and ensure proper use of memory.

#### Can self-assignment occur in other operators besides the assignment operator?

Answer: Self-assignment can occur in other operators, but it is most commonly an issue with the assignment operator.

#### How can the self-assignment problem impact the performance of a program?

Answer: The self-assignment problem can impact the performance of a program by causing it to run slower than expected or even crash if not properly handled.