

13 Lecture - CS304

Important Subjective

1. **What is a pointer to an object in C++?**

Answer: A pointer to an object is a variable that stores the memory address of an object in C++.

How is a pointer to an object declared in C++?

Answer: A pointer to an object is declared using the * operator, followed by the object type and the pointer variable name.

How is the value of an object pointed to by a pointer accessed in C++?

Answer: The value of an object pointed to by a pointer is accessed using the * operator.

How is memory allocated for an object pointed to by a pointer in C++?

Answer: Memory is allocated for an object pointed to by a pointer using the new operator.

What is the purpose of using pointers to objects in C++?

Answer: Pointers to objects are used in C++ to dynamically allocate memory for objects, pass objects to functions by reference, and manipulate objects indirectly.

What is the difference between a pointer to an object and a reference to an object in C++?

Answer: A pointer to an object can be null and can be reassigned to point to a different object, while a reference to an object cannot be null and cannot be reassigned.

How can a pointer to an object be passed to a function in C++?

Answer: A pointer to an object can be passed to a function in C++ by reference.

How is a member of a class or structure pointed to by a pointer accessed in C++?

Answer: A member of a class or structure pointed to by a pointer is accessed using the -> operator.

What is a dangling pointer in C++?

Answer: A dangling pointer in C++ is a pointer that points to an object that has been deleted or deallocated.

How can a memory leak occur in C++ when using pointers to objects?

Answer: A memory leak can occur in C++ when using pointers to objects if memory is dynamically allocated using the new operator and is not deallocated using the delete operator.