21 Lecture - CS304

Important Subjective

What is the difference between prefix and postfix increment/decrement operators?
Answer: Prefix increment/decrement operators modify the value of the operand before using it, while postfix increment/decrement operators modify the value of the operand after using it.

What is the behavior of the increment/decrement operators for integer types?

Answer: The increment/decrement operators for integer types increment or decrement the value of the operand by 1.

What is the behavior of the increment/decrement operators for floating-point types?

Answer: The behavior of the increment/decrement operators for floating-point types can lead to rounding errors.

What is the behavior of the increment/decrement operators for pointer types?

Answer: The behavior of the increment/decrement operators for pointer types depends on the underlying architecture, but generally, they move the pointer by the size of the pointed-to type.

What happens when we use the increment/decrement operators on an unsigned integer type and the result would be negative?

Answer: The behavior is undefined, and it's essential to use these operators with care to avoid unintended side effects or undefined behavior.

What is the result of the following code snippet?

CSS

Copy code

int a = 5:

int b = ++a + a++ +++a;

Answer: The result is undefined because the order of evaluation of the expressions is unspecified.

What is the result of the following code snippet?

CSS

Copy code

int a = 5;

int b = a++ * ++a;

Answer: The result is undefined because the order of evaluation of the expressions is unspecified.

What is the result of the following code snippet?

CSS

Copy code

int a = 5:

int b = ++a * a++;

Answer: The result is undefined because the order of evaluation of the expressions is unspecified.

What happens when we use the increment/decrement operators on a constant variable? Answer: It's not allowed to use the increment/decrement operators on a constant variable, and it results in a compilation error.

Can we use the increment/decrement operators on Boolean types?

Answer: No, we cannot use the increment/decrement operators on Boolean types because they are not arithmetic types.