Objectives - Tue 3/22/2022

- Const
- Static
- Linked lists

const

int const n = 5; // n is a read-only value
n = 7; // X
// "assignment of read-only variable 'a_n'"

«Type» CONSt **«NAME»** Const makes whatever *variable* comes after it read-only.

We will expand this into a stronger statement before we're done here.

CONST «*TYPE*» ... is equivalent to... «*TYPE*» CONST Rule: You can switch the position of const and a type name that is directly adjacent to const.

const*

int const* a_n = "; // *a_n is read-only const int* a_n = "; // *a_n is read-only a_n = &q; // * *a_n = 4; // * "assignment of read-only location '*a_n'"

int* const a_n = "; // a_n is read-only
a_n = &q; // X "assignment of read-only variable 'a_n'"
*a_n = 4; //

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const**

int const** a a n = "; // **a a n is read-only const int** a a n; // Same as above

*a a n = &q; // 🗟

**a a n = 4; // X "assignment of read-only location '*a n'"

const***

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const***

Const makes the variable—including all * <u>after</u> the const—read-only.

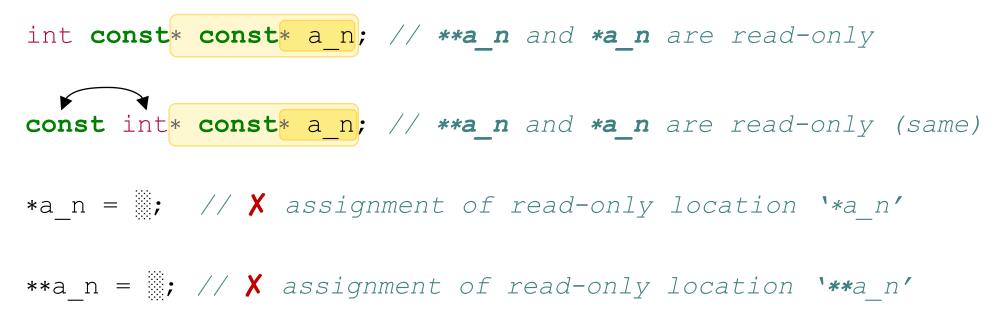
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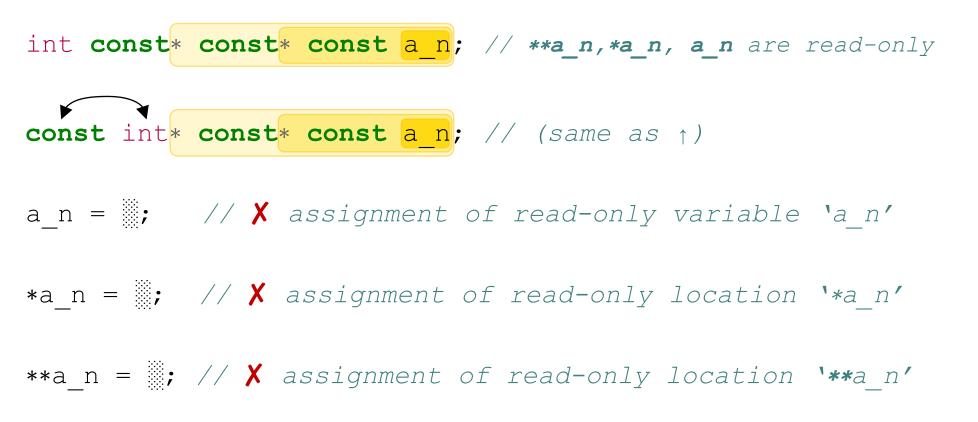
const* const

int const * const a n; // *a n and a n are read-only const int* const a n; // *a_n and a_n are read-only (same) a n = (); // X assignment of read-only variable 'a_n' *a n = ; // X assignment of read-only location '*a n'

const* const*



const* const* const



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Rules

Const is a promise you can't break *.

^{*} Okay, there are tricks, but let's not go there.

Const makes the variable—including all * <u>after</u> the const—read-only.

□ const «Type» ⇔ «Type» const

You can switch the position of const and a type name that is directly adjacent to const.