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Pure imaginary types with ++, --, <, <=, >=, >

When complex and imaginary were added to C99, most people were only thinking in terms of complex. Some restrictions were added to the relational operators (<, <=, >=, >) and postfix/prefix increment/decrement operators (++, --) which makes sense for complex (as they have no meaning). Unfortunately, that wording also outlawed the use of those operators with pure imaginary types (where they do have a meaning).

This proposal relaxes constraints to allow imaginary types (along with real types) to some operators.

Add new sections

G.? Uniary operators

G?.1 Postfix increment and decrement operators

This section supplements the constraints section of 6.5.2.4 in that imaginary type is allowed.

G?.2 Prefix increment and decrement operators

This section supplements the constraints section of 6.5.3.1 in that imaginary type is allowed.

G.5.? Classification macros

This section supplements the "constraints" section of 7.12.3 in that imaginary type is allowed.

G.5.? Relational operators

This section supplements the constraints section of 6.5.8 in that both operands being imaginary type is allowed.

G.5.? Comparison macros

This section supplements the "constraints" section of 7.12.14 in that both operands being imaginary type is allowed.