

Chapters 2-3: C++ Basics

The following topics will be covered in these two chapters:

- Variables (identifiers)
- Types
- Assignment, arithmetic operations, and arithmetic expressions
- Operators and precedence
- Functions
- Input and output using cin and cout
- Formatted input and output using
- Comments in programs

Variable Rules

- A variable name is referred to as an *identifier*
- Must declare all variable names
 - List name and type
- Keep length to 31 characters although longer names are possible
 - Older compiler restriction
- Give numeric values to variables with assignment statement

variable_name = value;
 ↑
 assignment operator

Example:

double x;	←	<i><u>Declare</u></i> x as a double (real number)
x = 24.5;	←	<i><u>Assign</u></i> a value to x

Naming Identifiers

- First character must be letter
- Other characters may be letters (a-z, A-Z, _) or digits 0-9
- Cannot use C++ keywords (reserved words – see next page)
- Cannot have blanks within identifiers
- Use descriptive names (Ex: `Area_Of_Circle` instead of `x`)

Examples: Valid Identifiers

Examples: Invalid Identifiers