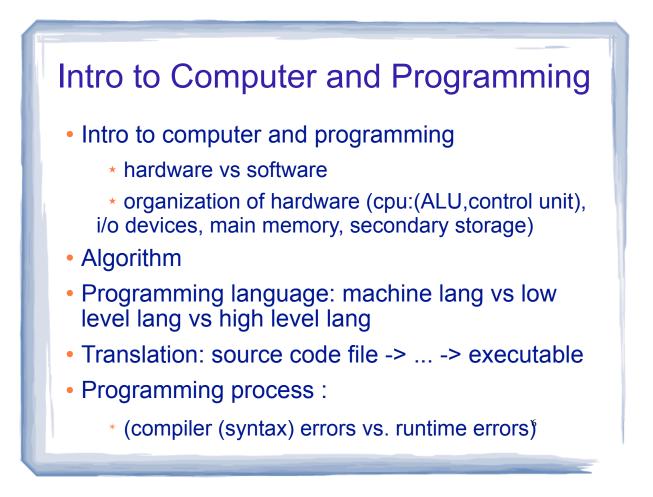


Example Tracing Problem

What will the EXACT output of the following program be?

5



Introduction to C++

- Literals: numbers, characters, strings
- Rules for C++ identifiers
- Variable Definitions
 - Initialization
- Assignment Statements
- Data Types
 - int, short, long, float, double, bool, char
 - values/ranges (rough idea)
 - suitability of each for various types of data _

Expressions and Types

8

- Numerical Expressions
 - * Operators: +, -, *, /, %
 - Precedence rules, parens
- Type Conversions:
 - binary operations
 - * assignment
 - type casting
- Integer division vs float division
- Named constants

Input/Output

- cout and <
- cin and >>
- formatting: setw, setprecision, fixed
- inputting character data into a char array
 - * char name[10];
 - * >> vs cin.getline(var)
 - * the null character
- using filestream objects for file I/O:
 - * ifstream, ofstream
 - open and close

Binary Representation

- binary number system, decimal number system
 - convert to/from
- binary arithmetic
- negative numbers:
 - * sign and magnitude
 - * 2's complement
 - * pros/cons of each
 - very simple conversions

9

