Logical and Relational Operators
What are expressions?

- C++ statements that will evaluate to either true or false
- false is interpreted as a 0 and 0 is interpreted as false
- true is interpreted as 1 and any number other than 0 is interpreted as true
Relational Operators

- “<” less than
- “<=” less than or equal to
- “>” greater than
- “>=” greater than or equal to
- “==” equal to
- “!=” not equal to
Relational Examples

short val = 5;
short num = 8;
short bob = 0;

(val <= num);  // evaluates to true (or 1)
(num % val > bob);  // true (3 is greater than 0)
(val == num);  // false
(num != (num / val));  // true
Logical Operators

- "&&" and
  - \((a && b)\) is only true if both \(a\) and \(b\) are true

- "||" or
  - \((a || b)\) is true if only one of \(a\) and \(b\) are true

- "!" not
  - \(!a\) is true if \(a\) is false
Note

- && has a higher precedence than ||
Logical Example

short val = 5;
short num = 8;
short bob = 0;

((val == num) || (!val));
End of Session