CONSTANTS & CLASS CONSTANTS

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WHAT?

- A constant is a fixed value

- The value of a constant can be set only at declaration; it cannot be reassigned.

- A class constant is a fixed value visible to the whole program.

WHY?

- Constants help to reduce complexity by eliminating magic numbers.
  - Magic number: numbers that make the program work, but have no obvious meaning in the program.
- Constants make our programs more readable and adaptable.
- Named constants provide explanations about the values.

HOW? – CONSTANTS WITHIN A METHOD

- Syntax – declare and initialized within method

  final <type> <name> = <value>;

- Visible to the method after it is declared

- Naming convention

  - All uppercase with words separated by underscores

- Examples

  /** Constant for interest rate */

  final double INTEREST_RATE = 3.5;

HOW? – CLASS CONSTANTS

- Syntax – declare and initialized within class (outside of method)

  public static final <type> <name> = <value>;

- Visible to the whole class

- Naming convention
  - All uppercase with words separated by underscores

- Examples

  /** Class constant for interest rate */

  public static final double INTEREST_RATE = 3.5;