

# Categories of Errors

- Let's bake a cake!
- **Compile-time error**
  - What you wrote isn't valid Java code (*spoon take mix ingredients using*)
  - `int x = 5 // Missing semicolon - syntax error!`
  - `System.out.prrrintln("hi"); // cannot find symbol `prrrintln``
- **Runtime error**
  - Syntax looks good, but something breaks when you run it (*set the oven to negative 1000 degrees Kelvin*)
  - `int x = 1 / 0;`
  - `int y = Integer.parseInt("one hundred");`

# Errors (cont.)

- **Logic error (a bug)**

- Your code runs but doesn't do what you want (*we made bread instead*)
- `System.out.println("Woof")` # Assignment wants "Bark"

- **Style error**

- Didn't follow the style guide! (*your recipe uses comic sans*)
- `int x=5;` # Need spaces before and after = operator
- `System.out.print ( "no style" ) ;`