## Functions that have side effects in the real world are not pure

```
// Side effects
def addUserToDB(id: Int, name: String)(implicit db: Database) : Boolean = {
   db.insert(id, name)
}

val u1 = addUserToDB( id = 1, name = "Justin") // True
val u2 = addUserToDB( id = 1, name = "Justin") // False (already exists)
```

## Hard to test

Not referentially transparent

Hard to compose

## **Effects**

Anything you can't "just" do twice is probably an effect