



Views

View Modifications – Introduction

Why use views?


- Hide some data from some users
- Make some queries easier / more natural
- Modularity of database access

Real applications tend to use lots
and lots (and lots and lots!) of views

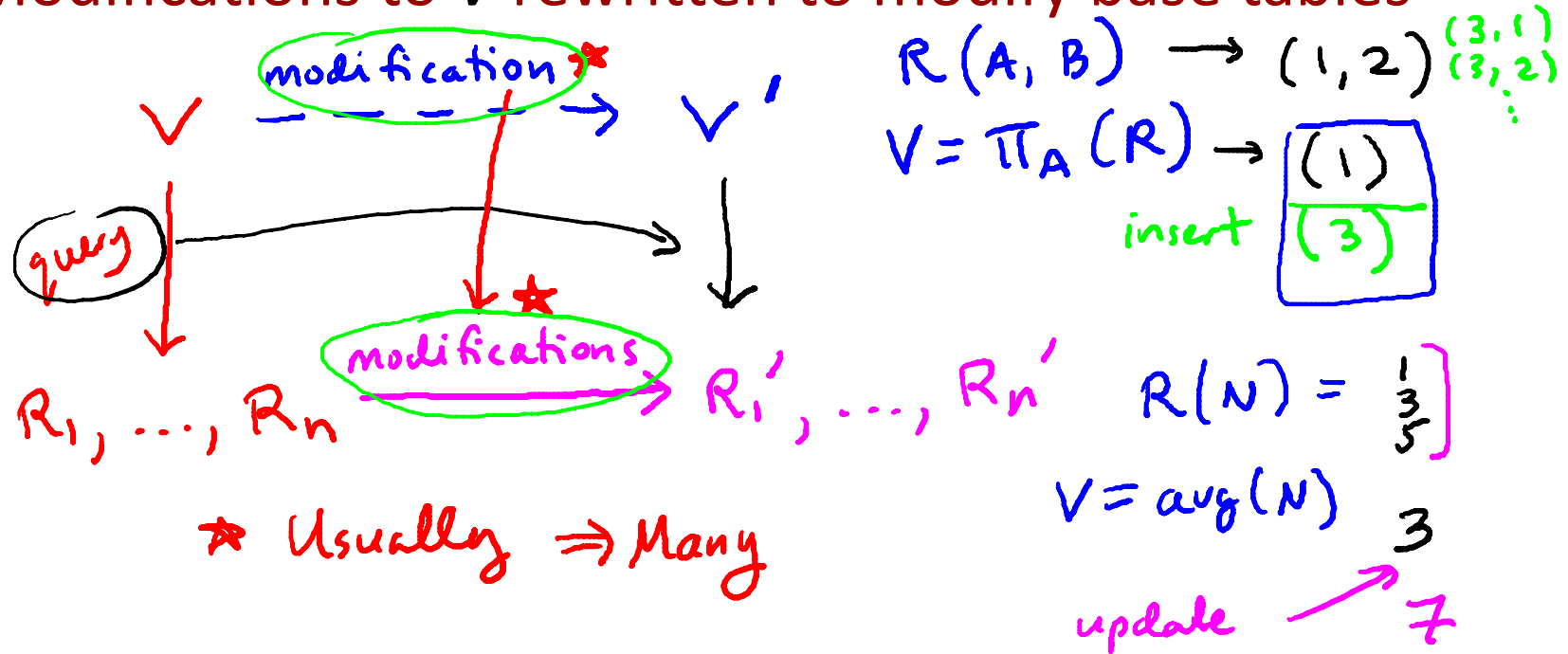
Querying views

- Once V defined, can reference V like any table
- Queries involving V rewritten to use base tables

Modifying views

- Once V defined, can we modify V like any table ?
- Doesn't make sense: V is not stored
- Has to make sense: views are some users' entire "view" of the database
- ❖ Solution: Modifications to V rewritten to modify base tables


❖ Modifications to V rewritten to modify base tables



❖ Modifications to V rewritten to modify base tables

(1) Rewriting process specified explicitly by view creator

- + Can handle all modifications
- No guarantee of correctness (or meaningful)

INSTEAD-OF
triggers
RULES

(2) Restrict views + modifications so that translation to base table modifications is meaningful and unambiguous

- + No user intervention
- Restrictions are significant

SQL standard