

# Relational Algebra

## WinRDBI Syntax Summary

### *WinRDBI*

- **select** condition (r)
  - **project**  $a_i, \dots, a_j$  (r)
  - r **union** s
  - r **difference** s
  - q **product** r
  - r **intersect** s
  - p **njoin** q
- ♫ : WinRDBI does not provide division and  $\theta$ -join operators to encourage the use of the fundamental relational algebra operators.

### *Formal Relational Algebra*

- $\sigma_{\text{condition}}(r)$
- $\pi_{a_i, \dots, a_j}(r)$
- $r \cup s$
- $r - s$
- $q \times r$
- $r \cap s$
- $p \triangleright \triangleleft q$

Understanding Relational Database Query Languages

### Additional tips:

- Name of each relation/attribute must begin with a lowercase letter
- Name of any relation/attribute should not be any winRDBI keyword such as "select", "project", "join", etc.
- Any attribute value cannot have apostrophe
- Use char instead of DATE type
- Use numeric instead DECIMAL type or INTEGER type