

Alex Stewart

CS350 HW9

**Query Processing/Optimization and Database Tuning (Due Week 10 - Friday night
at midnight)**

19.15

Project - no duplicates

$$\text{final_cost} = r * p$$

Union, Intersection, and Set Difference - sort-merge algorithm.

Cartesian Product - every combination of the two tables

$$\text{final_cost} = (\text{Number_of_Rows}(Y) * \text{Number_of_Rows}(X)) + (\text{Number_of_Columns}(Y) + \text{Number_of_Columns}(X))$$

19.16

$$2x + (a*b)^2 + (b*y)^2$$

19.17

Non-dense index can be used in implementation of an aggregation operator. The non-dense index can be used to implement MIN function, if the in the data block, index key pointer point to smallest key value.