University of Toronto
CSC343 Fall 2017

In-class Exercises: Projection and Minimal Basis

1. Suppose we have these FDs: : $S = \{ABE \rightarrow CF,\ \ DF \rightarrow BD,\ \ C \rightarrow DF,\ \ E \rightarrow A,\ \ AF \rightarrow B\}$

   Project the FDs onto: $L = CDEF$

Attributes to take all subsets X of: C D E F	Closure of the subset X^+	Functional dependencies inferred

Final answer: The projection of S onto L is

2. Find a minimal basis for this set of FDs: $S = \{ABF \to G, \quad BC \to H, \quad BCH \to EG, \quad BE \to GH\}$.

Final answer: A minimal basis for S is