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:				Closure of the subset	
\mathbf{C}	D	\mathbf{E}	\mathbf{F}	X^+	Functional dependencies inferred

Final answer: The projection of S onto L is

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

Final answer: A minimal basis for S is