

Bonus 1

Suppose, a relational schema $R(v\ w\ x\ y\ z)$ and set of functional dependencies F and G are as follow: $F : \{ w \rightarrow x, wx \rightarrow y, z \rightarrow wy, z \rightarrow v \}$ $G : \{ w \rightarrow xy, z \rightarrow wx \}$ Check the equivalency of functional dependencies F and G . (5 marks)

Bonus 2

Suppose a relational schema $R(w\ x\ y\ z)$, and set of functional dependency as following $F : \{ x \rightarrow w, wz \rightarrow xy, y \rightarrow wxz \}$ Find the canonical cover F_c (Minimal set of functional dependency) with the list of candidate keys. (5 marks)