## CS1555 Recitation 10

Objective: to practice normalization, finding canonical forms.

<u>Part 1:</u> For each of the following relations R and sets of functional dependencies F, find the canonical cover (minimal cover) of F.

1. Consider the following set of functional dependencies F on a relation R (A, B, C, D, E):

 $A \rightarrow BC$ 

 $A \rightarrow D$ 

 $B \rightarrow C$ 

 $\mathbf{C} \to \mathbf{D}$ 

 $\mathrm{DE} \to \mathrm{C}$ 

 $\mathrm{BC} \to \mathrm{D}$ 

2. Consider the following set of functional dependencies F on relation R (A, B, C, D, E, H):

 $A \rightarrow C$ 

 $AC \rightarrow D$ 

 $E \rightarrow AD$ 

 $E \rightarrow H$ 

 $A \rightarrow CD$ 

 $E \rightarrow AH$