

CS 2541- Normal Forms: Inclass exercises

Table

Names: _____

For each question below, answer the following:

- What are the keys for the relation
- Is the relational in 3NF ? Why or why not ?
- Is it in BCNF? Why or why not ? If not, then decompose into BCNF
- Is the decomposition in (d) a dependency preserving decomposition? Why?

Ques.1: $R_2(A,B,F)$, $AB \rightarrow F$, $B \rightarrow F$

Ques.1: Consider the schema $R_1=(C,T,H,R,S,G)$ with attributes Course(C), Time (T), Hour (H), Section (S), Grade (G) Room (R) and the dependencies:

$C \rightarrow T$

$CS \rightarrow G$

$HS \rightarrow R$

$HT \rightarrow R$

$HR \rightarrow C$