

Using the following schema:

$R(abcd), S = \{ab \rightarrow c, c \rightarrow d\}$

What are the keys?

Is it in 3NF? If not what is the violating dependency?

Using the following schema:

$R(abcde), S = \{ab \rightarrow c, c \rightarrow b, a \rightarrow d\}$

What are the keys?

Is it in 3NF? If not what is the violating dependency?