

Task A

Table location

A: id, B: building, C: room

$A \rightarrow \{B, C\}$

A is the primary key in this relationship

This relation is already in BCNF.

Table users

A: netID, B: user_name, C: phone, D: email, E: is_student, F: location_id

$A \rightarrow \{B, C, D, E, F\}$

A is the primary key in this relationship

This relation is already in BCNF.

Table item

A: id, B: item_name, C: is_broken, D: location_id

$A \rightarrow \{B, C, D\}$

A is the primary key in this relationship

This relation is already in BCNF.

Table request

A: id, B: description, C: requestDate, D: is_completed, E: user_id, F: item_id

$A \rightarrow \{B, C, D, E, F\}$

A is the primary key in this relationship

This relation is already in BCNF.

Table responsible_for

A: user_id, B: location_id

$AB \rightarrow \{A, B\}$

AB is the primary key in this relationship

This relation is already in BCNF.

Overall, all our tables are already in BCNF.