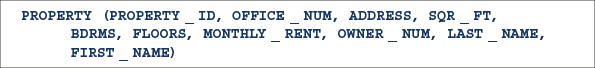
1. Determine the functional dependencies that exist in the following table and then convert this table to an equivalent collection of tables that are in third normal form.



* OFFICE\_NUM -> OFFICE\_NAME
* ADDRESS -> SQR-FT, BDRMS, FLOORS, MONTHLY\_RENT, OWNER\_NUM
* OFFICE (OFFICE\_NUM, OFFICE\_NAME)
* PROPERTY (ADDRESS, SQR\_FT, BDRMS, FLOORS, MONTHLY\_RENT, OWNER\_NUM))

1. Determine the functional dependencies that exist in the following table and then convert this table to an equivalent collection of tables that are in third normal form.



* PROPERTY\_ID -> OFFICE\_NUM, ADDRESS
* ADDRESS -> SQR\_FT, BDRMS, FLOORS, MONTHLY\_RENT, OWNER\_NUM
* OWNER\_NUM -> LAST\_NAME, FIRST\_NAME
* PROPERTY (PROPERTY\_ID, OFFICE\_NUM, ADDRESS)
* LOCATION (ADDRESS, SQR\_FT, BDRMS, FLOORS, MONTHLY\_RENT, OWNER\_NUM)
* OWNER (OWNER\_NUM, LAST\_NAME, FIRST\_NAME)

1. StayWell also rents out properties on a weekly basis to students attending summer school in the Seattle area. Design a database to meet the following requirements, using the shorthand representation and a diagram of your choice.
2. For each student renter, list his or her number, first name, middle initial, last name, address, city, state, postal code, telephone number, and e-mail address.

* STUDENT (STUDENT\_NO, FIRST\_NAME, MIDDLE\_INITIAL, LAST\_NAME, ADDRESS, CITY, STATE, POSTAL\_CODE, TELEPHONE\_NO, EMAIL)

1. For each property, list the office number, property address, city, state, postal code, square footage, number of bedrooms, number of floors, maximum number of persons that can sleep in the unit, and the base weekly rate.

* PROPERTY (OFFICE\_NO, ADDRESS, CITY, STATE, POSTAL\_CODE, SQR\_FT, BDRMS, FLOORS, MAX\_PERSONS, WEEKLY\_RATE)

1. For each rental agreement, list the renter number, first name, middle initial, last name, address, city, state, postal code, telephone number, start date of the rental, end date of the rental, and the weekly rental amount. The rental period is one or more weeks.

* RENTAL (RENTER\_NO, FIRST\_NAME, MIDDLE\_INITIAL, LAST\_NAME, ADDRESS, CITY, STATE, POSTAL\_CODE, TELEPHONE\_NO, START\_DATE, END\_DATE, WEEKLY\_RENTAL)

