# Tutorial 9 – Views and Denormalisation

## Question 1

The following linked tables represent a property renting database.

Branch(branchNo, street, city, postcode)

Property(propertyNo, Street, city, postcode, type, rooms, rent, staffNo\*, BranchNo\*)

Staff(staffNo, name, position, dob, salary, branchNo\*)

1. Write SQL to create views that meet the following requirements:
   1. The manager at branch B003 can see only the staff who work there.
   2. Staff at B003 can access non-sensitive staff data for that branch. (salary and dob are sensitive.)
   3. A view that show staff who manage properties for rent, including their staff number and the number of properties they manage.
2. Show which tables are not in 3NF and discuss whether to keep them un-normalised or not.

## Question 2

This question concerns the ‘pillaging pirates’ database. The table Pillage(P\_code\*, B\_code\*, Bt\_code\*, date) has foreign keys referencing the primary keys of the Pirate, Boat and Booty tables.

1. A common query lists all instances of pillage between two dates, including all information from the booty table and the name of the pirate responsible. Suggest a de-normalisation that will speed up such queries. Which of the five cases from the lecture is this an example of?
2. Could any of the other cases from the lecture be useful for this database? Explain your answer.