

## BANK STAFF MANAGEMENT

We want to design a database for personnel management of a particular bank that has many employees and an extensive network of agencies. The following description summarizes the requirements of future users of the database:

- a) Employees are identified by a code of employee, and also want to know their ID card, their SSN, name and surname. It will be important to record their city of residence, considering that there are cities where no employee resides.
- b) We want to know where bank agencies are allocated (in what city). These agencies are identified by the city where they are and a name to distinguish agencies in the same city. We want to keep track of the number of inhabitants of the cities, and the address and telephone number of the agencies. You should consider that the database also includes cities where there is no agency.
- c) An employee, at a given time, is working in a single agency, which not prevents that can be transferred to another or even go back to work for a company where he had worked previously. Anyway, we just want to know where an employee works at the current moment and from what date.
- d) Employees may have academic qualifications (although not all have them). We want to know what titles give credit to employees.
- e) Each employee has a specific job category (auxiliary, second officer, first officer ...). Each category has a base salary and a certain price given for extra time. We want to keep track of the current category of each employee, and the basic salary and the price of the extra hour of each category.
- f) Some employees (not all) are affiliated to a union. An agreement was reached to deduct a union fee from payroll monthly for every member union. This fee is unique for all members union affiliated to the same central. It is necessary to store affiliations of employees and the fee paid in every union.
- g) There are two different types of employees:
  - Those who have a permanent contract, of which we want to know the age.
  - Those with temporary contracts, of which we want to know the start and end dates of your last contract.
    - If a temporary employee becomes permanent, it is assigned a new code of employee. Take into account that a permanent employee never becomes temporarily. Everything that has been said so far (transfers, qualifications, categories, union membership ...) applies to both permanent and temporary employees.
- h) The permanent employees have the opportunity to ask different types of loans (by

## **EXERCISE**



marriage, by homebuyers, studies, etc.). They can ask more than one loan, provided they are of different types. We want to record the loans requested by employees and on what date did it. Each type of loan has different conditions, which in particular we will be interested in the interest rate and the period of validity of the loan.

**IMPORTANT**: When prerequisites are not enough, you can make the assumptions you believe necessary for the model proposed.