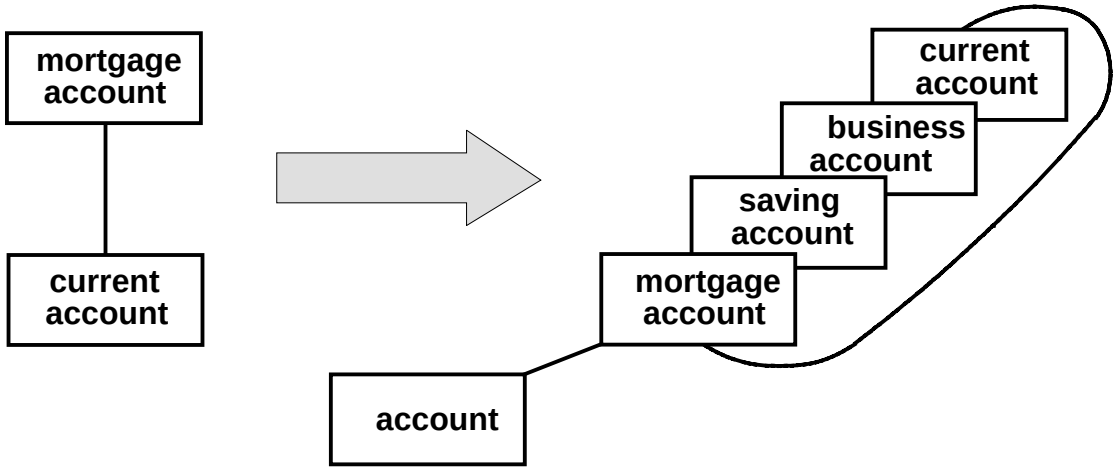
CASE STUDY 1: BANK

TYPE DEFINITIONS:

type **office**	=	**address, postal_code, town, telephone_number, postal_giro, bank, case**
type **head office**	=	**[office], region**
type **branch**	=	**[office], head office**
type **holder**	=	**name, address, postal_code, town, office, identification**
type **account**	=	**holder, balance, transaction_date, currency, case**
type **mortgage account**	=	**[account], current account, interest, redemption method, collection_indication**
type **saving account**	=	**[account], condition, interest**
type **business account**	=	**[account], dr_interest, cr_interest, cr_commission, cr_limit**
type **current account**	=	**[account], dr_interest, cr_interest, cr_limit, cheque card, Eurocheque**
type **stock**	=	**account, nominal_value, purchase_value, purchase_date, case**
type **share**	=	**[stock], number**
type **bond**	=	**[stock], start_number, end_number.**

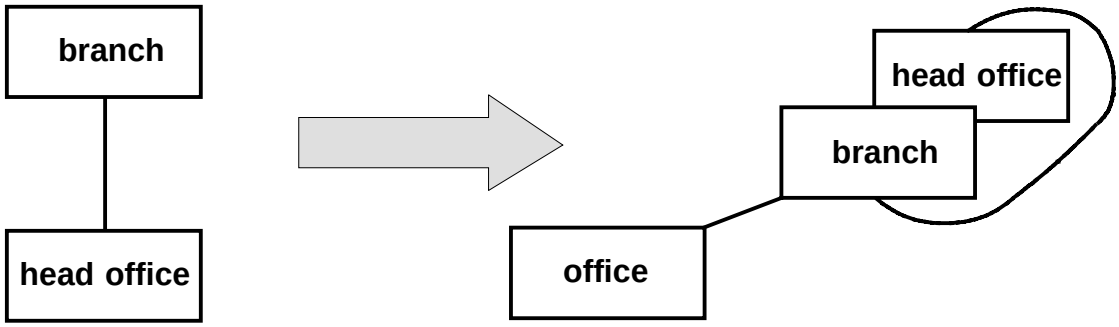
CASE STUDY 1: BANK
special relationships

CASE 1:



type **mortgage account = [account], ..., current account**
type **current account = [account], ...**

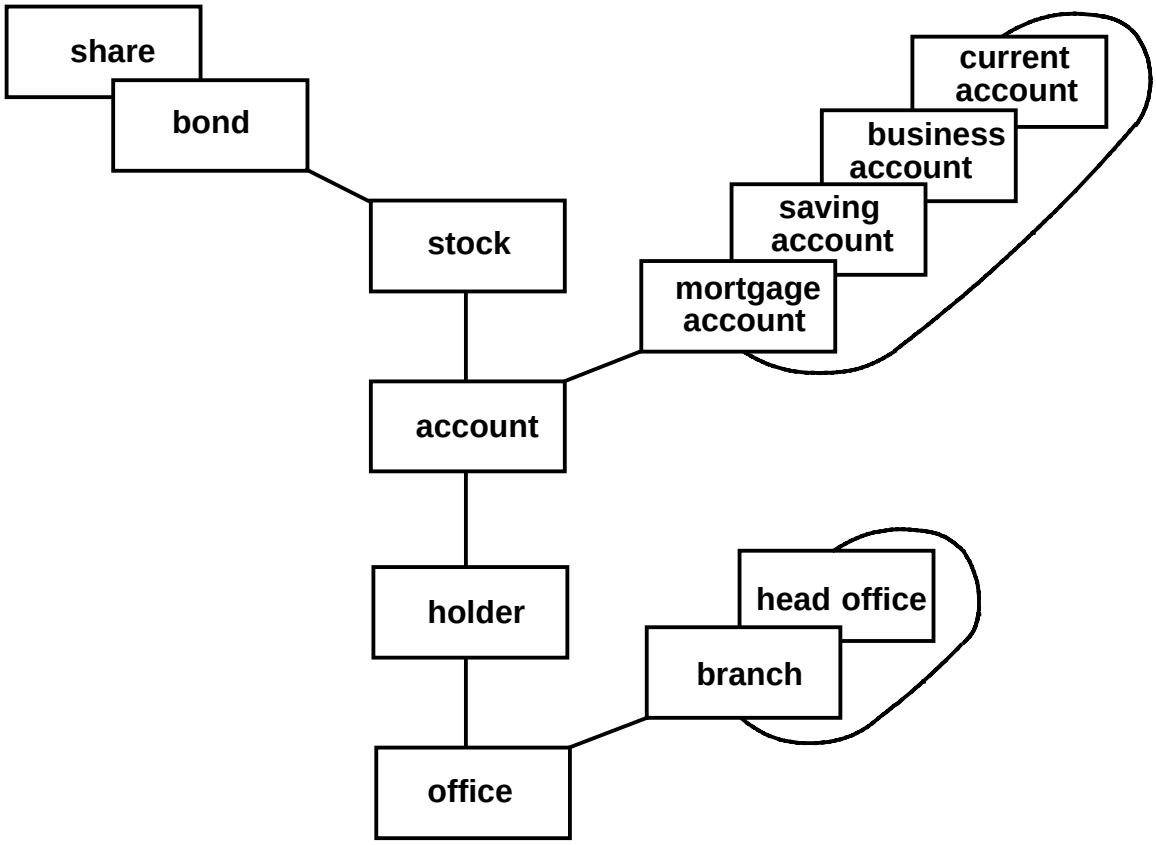
CASE 2:



type **office = ...**
type **branch = [office], ..., head office**
type **head office = [office], ...**

CASE STUDY 1: BANK

ABSTRACTION HIERARCHY:



EXERCISES: Formulate the following queries in Xplain:

1 **Determine the number of offices holding shares.**

2 **Select the account holders with accounts at more than one office.**

3 **Determine the total of savings, subject to the currency exchange rate.**

4 **Select mortgage account holders.**

CASE STUDY 1: BANK

EXERCISE 5

Consider the following alternative relationships between holder, office and account:

***type* office = address, ...**
***type* holder = office, name, ...**
***type* account = office, holder, balance, ...**

What are the consequences of this structure for database production?