

2.9

branch(branch_name, branch_city, assets)

customer(customer_name, customer_street, customer_city)

loan(loan_number, branch_name, amount)

borrower(customer_name, loan_number)

account(account_number, branch_name, balance)

depositor(customer_name, account_number)

备注：蓝色为主码，下划线为外码

2.13

a. Π loan_number (σ amount > 10000 (loan))

b. Π customer_name (σ balance > 6000 (account \bowtie depositor))

c. Π customer_name (σ balance > 6000 (account \bowtie depositor)
 \cap branch_name = "Uptown" (account \bowtie depositor))

6.11

a. Π person_name (σ company_name = "First Bank Corporation" (works))

b. Π person_name, city (employee \bowtie (σ company_name = "First Bank Corporation" (works))))

c. Π person_name, street, city (employee \bowtie (σ company_name = "First Bank Corporation" \cap salary > 10000 (works))))

d. Π person_name (employee \bowtie works \bowtie company)

e. Π company_name (company \div (σ company_name = "Small Bank Corporation" (company))))

6.13

a. Π company_name (company_name \Join count-distinct employee_name (works) \Join Γ max (num-employee) (σ company-strength (company_name, num-employee))

b. Π company_name (works \Join Γ min (salary) (works))

c. Π company_name (ρ_t . (company_name, avg_salary) (company_name \Join avg (salary) (works)) \Join ρ_{FBC} . avg_salary > FBC.avg_salary (ρ_{FBC} . (company_name, avg_salary) (σ company_name = "First Bank Corporation"))