

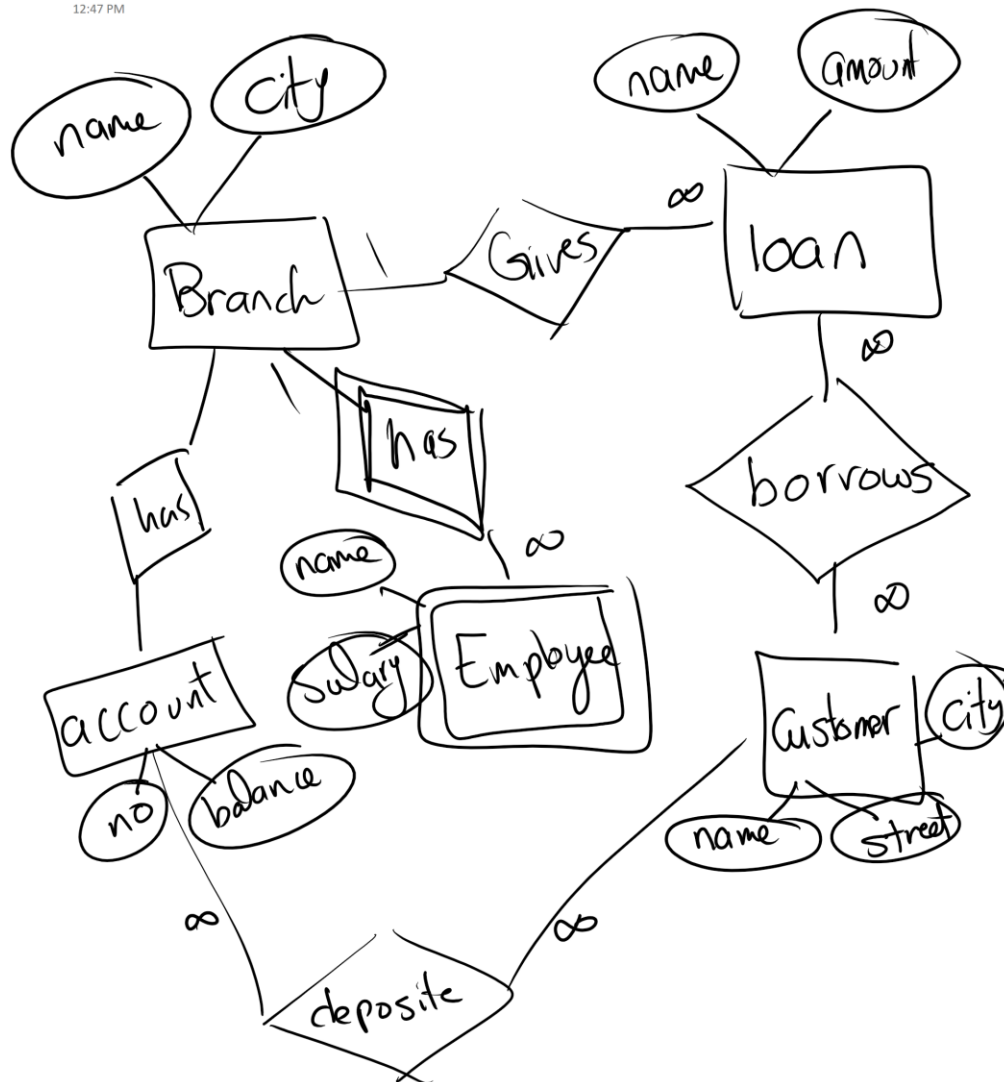


Sheet 6

يتم تقييم الطالب على انجاز هذا ال sheet (2 درجة للتصميم ودرجة لل insert و 7 درجات لل Queries).
من حق الطالب الاطلاع على أي مصدر (lectures or/and sheets)

Q1) Consider the ER diagram shown in Figure for part of a BANK database. Each bank can have multiple branches, and each branch can have multiple accounts and loans.

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12:47 PM



account ('A-101', 'Downtown', 500), account ('A-102', 'Perryridge', 400),
account ('A-201', 'Brighton', 900), account ('A-215', 'Mianus', 700),
account ('A-217', 'Brighton', 750), account ('A-222', 'Redwood', 700),
account ('A-305', 'Round Hill', 350).

branch ('Brighton', 'Brooklyn', 7100000), branch ('Downtown', 'Brooklyn',
9000000), branch ('Mianus', 'Horseneck', 400000), branch ('North Town',
'Rye', 3700000), branch ('Perryridge', 'Horseneck', 1700000), branch
('Pownal', 'Bennington', 300000), branch ('Redwood', 'Palo Alto',
2100000), branch ('Round Hill', 'Horseneck', 8000000);

customer ('Adams', 'Spring', 'Pittsfield'), customer ('Brooks', 'Senator',
'Brooklyn'), customer ('Curry', 'North', 'Rye'), customer ('Glenn', 'Sand
Hill', 'Woodside'), customer ('Green', 'Walnut', 'Stamford'), customer
('Hayes', 'Main', 'Harrison'), customer ('Johnson', 'Alma', 'Palo Alto');
customer ('Jones', 'Main', 'Harrison'), customer ('Lindsay', 'Park',
'Pittsfield'), customer ('Smith', 'North', 'Rye'), customer ('Turner',
'Putnam', 'Stamford'), customer ('Williams', 'Nassau', 'Princeton').

depositor ('Hayes', 'A-102'), depositor ('Johnson', 'A-102'), depositor
('Johnson', 'A-201'), depositor ('Jones', 'A-217'), depositor ('Lindsay', 'A-
222'), depositor ('Smith', 'A-215'), depositor ('Turner', 'A-305');

loan ('L-11', 'Round Hill', 900), loan ('L-14', 'Downtown', 1500), loan ('L-
15', 'Perryridge', 1500), loan ('L-16', 'Perryridge', 1300), loan ('L-17',
'Downtown', 1000), loan ('L-23', 'Redwood', 2000), loan ('L-93', 'Mianus',
500),

borrower ('Adams', 'L-16'), borrower ('Curry', 'L-93'), borrower ('Hayes',
'L-15'), borrower ('Jackson', 'L-14'), borrower ('Jones', 'L-17'), borrower
('Smith', 'L-11'), borrower ('Smith', 'L-23'), borrower ('Williams', 'L-17');

employee ('Adams', 'Perryridge', 1500), employee ('Brown', 'Perryridge',
1300), employee ('Gopal', 'Perryridge', 5300), employee ('Johnson',
'Downtown', 1500), employee ('Loreena', 'Downtown', 1300), employee
('Peterson', 'Downtown', 2500), employee ('Rao', 'Austin', 1500),
employee ('Sato', 'Austin', 1600);

Then write the SQL statement for each of the following queries:

1. Find all loans over \$1200.
2. Find all customer names that have account number or not.
3. List all details of all employees with the second letter is 'a'.
4. List all customers and the total of borrowed loans. Sort the output according to total loans.
5. List all customers who borrow loans exceeds 1200.
6. List the largest loan amount in the bank.
7. List all customers who borrow total loans exceeds the largest loan in the bank.
8. Find the names of all customers who have a loan, an account, or both from the bank.
9. Find the names of all customers who have a loan and an account at the bank.
10. Find the names of all customers who have a loan at the Perryridge branch.
11. Find the names of all customers who have a loan at the Perryridge branch, but no account at any branch of the bank.
12. Find the names of all customers who have an account at the Downtown and Mianus branches.
13. Find the average loan amount of each customer
14. Find the names of all customers who have an account at every branch located in Brooklyn

[Hint: after finishing answer the sheet, create a view for each query by writing the following query in the sql editor]

- create view view1 as (SELECT * FROM player)
- or go to the views on MySQL workbench, right click, create view, then write your query.

Very important note, you can write a query based on a stored view such as

SELECT name FROM view1.