

## S7

### Problem Statement:

Tasks: create View1 listing customers with loan from 'Pune\_Station'; create View2 on Branch selecting two columns and allow DML; create View3 on borrower and depositor selecting one column from each; union of left and right join for customers who have account or loan or both; create simple and unique index; display index info.

### Code:

```
-- S7: Views, union, indexes (MySQL)
-- 1. View1: customers with loan from 'Pune_Station'
CREATE VIEW View1 AS
SELECT DISTINCT b.cust_name
FROM Borrower b
JOIN Loan l ON b.loan_no = l.loan_no
WHERE l.branch_name = 'Pune_Station';

-- 2. View2 on Branch (two columns)
CREATE VIEW View2 AS SELECT branch_name, branch_city FROM Branch;

-- 3. View3 combining borrower and depositor cust_name
CREATE VIEW View3 AS
SELECT cust_name FROM Borrower
UNION
SELECT cust_name FROM Depositor;

-- 4. Union of left and right join for customers with account or loan or both
SELECT d.cust_name, a.acc_no, l.loan_no
FROM Depositor d
LEFT JOIN Account a ON d.acc_no = a.acc_no
LEFT JOIN Borrower b ON d.cust_name = b.cust_name
LEFT JOIN Loan l ON b.loan_no = l.loan_no
UNION
SELECT b.cust_name, a.acc_no, l.loan_no
FROM Borrower b
LEFT JOIN Depositor d ON b.cust_name = d.cust_name
LEFT JOIN Account a ON d.acc_no = a.acc_no
LEFT JOIN Loan l ON b.loan_no = l.loan_no;

-- 5. Indexes
CREATE INDEX idx_depositor_cust ON Depositor(cust_name);
CREATE UNIQUE INDEX ux_account_accno ON Account(acc_no);

-- 6. Display index info
SHOW INDEX FROM Account;
```