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# **SQL** Cheat Sheet: Views, Stored Procedures and Transactions

### Views

Topic	Syntax	Description	Example
Create View	CREATE VIEW view_name AS SELECT column1, column2, FROM table_name WHERE condition;	A CREATE VIEW is an alternative way of representing data that exists in one or more tables.	CREATE VIEW EMPSALARY AS SELECT EMP_ID, F_NAME, L_NAME, B_DATE, SEX, SALARY FROM EMPLOYEES;
Update a View	CREATE OR REPLACE VIEW view_name AS SELECT column1, column2, FROM table_name WHERE condition;	The CREATE OR REPLACE VIEW command updates a view.	CREATE OR REPLACE VIEW EMPSALARY AS SELECT EMP ID, F NAME, L NAME, B DATE, SEX, JOB_TITLE, MIN_SALARY, MAX_SALARY FROM EMPLOYEES, JOBS WHERE EMPLOYEES.JOB_ID = JOBS.JOB_IDENT;
Drop a View	DROP VIEW view_name;	Use the DROP VIEW statement to remove a view from the database.	DROP VIEW EMPSALARY;

## Stored Procedures in IBM Db2 using SQL

			#SET TERMINATOR @ CREATE PROCEDURE RETRIEVE_ALL
Stored Procedures	#SET TERMINATOR @ CREATE PROCEDURE PROCEDURE NAME	A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.  The default terminator for a stored procedure is semicolon(;). To set a different terminator we use SET TERMINATOR clause followed by the terminator such as '@'.	LANGUAGE SQL READS SQL DATA
	LANGUAGE		DYNAMIC RESULT SETS 1
			BEGIN
	BEGIN		DECLARE C1 CURSOR WITH RETURN FOR
	END @		
			SELECT * FROM PETSALE;
			OPEN C1;
			END @

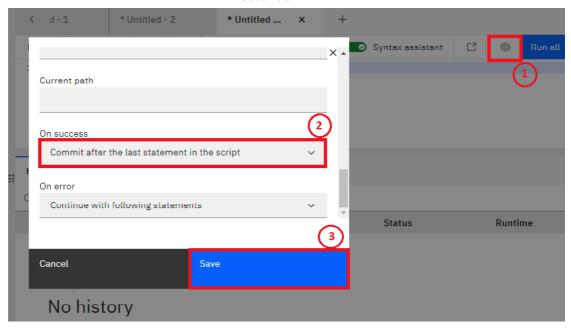
## Stored Procedures in MySQL using phpMyAdmin

The default terminator for a ROLLBACK command is semicolon (;).

Stored Procedures	DELIMITER //	A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.	DELIMITER //
	CREATE PROCEDURE PROCEDURE_NAME		CREATE PROCEDURE RETRIEVE_ALL()
	BEGIN		BEGIN
	END //	The default terminator for a stored procedure is semicolon (;). To set a different terminator we use DELIMITER clause followed by the terminator such as \$\$ or //.	SELECT * FROM PETSALE;
	DELIMITER ;		END //
			DELIMITER ;

Transactions with Db2				
Commit COMMIT; command	A COMMIT command is used to persist the changes in the database.  The default terminator for a COMMIT command is semicolon (;).	CREATE TABLE employee(ID INT, Name VARCHAR(20), City VARCHAR(20), Salary INT, Age INT);  INSERT INTO employee( ID, Name, City, Salary, Age) VALUES( 1, 'Priyanka pal', 'Nasik', 36000, 21), (2, 'Riy 'Bangalor', 82000, 29);  SELECT *FROM employee; COMMIT;		
Rollback ROLLBACK; command	A ROLLBACK command is	As auto-commit is enabled by default, all transactions will be committed. We need to disable this opti see how rollback works.		
	used to rollback the transactions which are not saved in the database.	For db2, we have to disable auto-commit manually. Click the gear icon located on the right side of the Assistant window. Next, select the "On Success" drop-down and choose "commit after the last statement script" Remember to save your changes!		

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CREATE TABLE employee(ID INT, Name VARCHAR(20), City VARCHAR(20), Salary

INSERT INTO employee VALUES (3, 'Swetha Tiwari', 'Kanpur', 38000, 38);
SELECT \*FROM employee;

ROLLBACK; SELECT \*FROM employee;

### Transactions with MySQL

INT, Age INT); A COMMIT command is used to persist the changes START TRANSACTION; COMMIT: in the database. Commit INSERT INTO employee( ID, Name, City,
Salary, Age) VALUES( 1, 'Priyanka pal',
'Nasik', 36000, 21), (2, 'Riya
chowdary', 'Bangalor', 82000, 29); command The default terminator for a COMMIT command is semicolon (;). SELECT \*FROM employee; COMMIT; As auto-commit is enabled by default, all transactions will be committed. We need to disable this option to see how rollback works. For MySQL A ROLLBACK command is used to rollback the use the command "SET autocommit = 0;" ROLLBACK: transactions which are not saved in the database. Rollback command The default terminator for a ROLLBACK INSERT INTO employee VALUES (3, 'Swetha
Tiwari', 'Kanpur', 38000, 38); command is semicolon (;). SELECT \*FROM employee; ROLLBACK; SELECT \*FROM employee;

### **Db2** Transactions using Stored Procedure

-- #SET TERMINATOR @ CREATE PROCEDURE TRANSACTION\_ROSE LANGUAGE SQL MODIFIES SOL DATA **BEGIN** DECLARE SQLCODE INTEGER DEFAULT 0; DECLARE retcode INTEGER DEFAULT 0; DECLARE CONTINUE HANDLER FOR -#SET TERMINATOR @ SQLEXCEPTION SET retcode = SQLCODE; CREATE PROCEDURE PROCEDURE\_NAME A COMMIT command is used to persist the changes UPDATE BankAccounts **BEGIN** SET Balance = Balance-200 in the database. Commit WHERE AccountName = 'Rose'; COMMIT; command The default terminator for a COMMIT **UPDATE** BankAccounts END command is semicolon (;). SET Balance = Balance-300 WHERE AccountName = 'Rose'; IF retcode < 0 THEN
ROLLBACK WORK;</pre> ELSE COMMIT WORK; END IF; **END** --#SET TERMINATOR @ CREATE PROCEDURE TRANSACTION\_ROSE LANGUAGE SQL MODIFIES -- #SET TERMINATOR @ Rollback A ROLLBACK command is used to rollback the

command CREATE PROCEDURE PROCEDURE\_NAME transactions which are not saved in the database. TRANSACTION\_ROSE LANGUAGE SQL MODIFI

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> **BEGIN** ROLLBACK: COMMIT; END

The default terminator for a ROLLBACK command is semicolon (;).

SOL DATA BEGIN

> DECLARE SQLCODE INTEGER DEFAULT 0; DECLARE retcode INTEGER DEFAULT 0; DECLARE CONTINUE HANDLER FOR SQLEXCEPTION

SET retcode = SQLCODE; UPDATE BankAccounts SET Balance = Balance-200
WHERE AccountName = 'Rose';

UPDATE BankAccounts SET Balance = Balance-300 WHERE AccountName = 'Rose';

IF retcode < 0 THEN
ROLLBACK WORK;</pre>

FI SF COMMIT WORK;

END IF; END @

### **MySQL Transactions using Stored Procedure**

DELIMITER //

CREATE PROCEDURE PROCEDURE NAME

**BEGIN** 

Commit command COMMIT;

END // DELIMITER;

DELIMITER //

CREATE PROCEDURE PROCEDURE\_NAME

**BEGIN** 

Rollback command ROLLBACK;

COMMIT:

END //

DELIMITER;

DELIMITER //

CREATE PROCEDURE TRANSACTION\_ROSE()

DECLARE EXIT HANDLER FOR SQLEXCEPTION

BEGIN ROLLBACK; RESIGNAL;

A COMMIT command is used to persist the changes  $\ensuremath{\mathsf{END}}$ ;

in the database.

The default terminator for a COMMIT command is semicolon (;).

START TRANSACTION; UPDATE BankAccounts SET Balance = Balance-200 WHERE AccountName = 'Rose';

**UPDATE** BankAccounts SET Balance = Balance-300 WHERE AccountName = 'Rose';

COMMIT: END // DELIMITER;

DELIMITER //

CREATE PROCEDURE TRANSACTION\_ROSE()

BEGIN

DECLARE EXIT HANDLER FOR SQLEXCEPTION

BEGIN ROLLBACK; RESIGNAL:

A ROLLBACK command is used to rollback the transactions which are not saved in the database.

The default terminator for a ROLLBACK

command is semicolon (;).

START TRANSACTION; UPDATE BankAccounts
SET Balance = Balance-200
WHERE AccountName = 'Rose';

**UPDATE** BankAccounts SET Balance = Balance-300 WHERE AccountName = 'Rose';

COMMIT: END // DELIMITER;

## Author(s)

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