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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

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

## $Stored\ Procedures\ in\ MySQL\ using\ phpMyAdmin$

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 //	semicolon (;). To set a different terminator we use DELIMITER clause followed by the terminator such as \$\$ or //	SELECT * FROM PETSALE;
	DELIMITER;		END //
			DELIMITER :

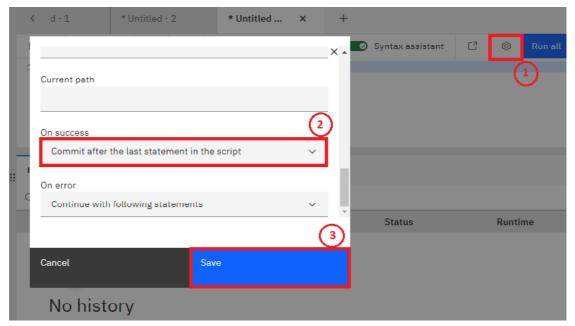
Transactions with Db2				
Commit COMMIT; command	A COMMIT command is used to persist the changes in the database.  The default terminator for a COMMIT command is semicolon (;).	CREATE TABLE employee(ID INT, Name VARCHAR(20), City VARCHAR(20), Salary INT, Age INT); INSERT INTO employee( ID, Name, City, 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	For db2, we have to disable auto-commit manually. Click the gear icon located on the right side of the		

rollback the

Assistant window. Next, select the "On Success" drop-down and choose "commit after the last statement script" Remember to save your changes! transactions which are not saved in the database. The default terminator for a ROLLBACK command is semicolon (;).

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

SELECT \*FROM employee;

#### Transactions with MySQL

CREATE TABLE employee(ID INT, Name
VARCHAR(20), City VARCHAR(20), Salary
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 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 use the command "SET autocommit = 0;" A ROLLBACK command is used to rollback the **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 SQL DATA 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; ELSE COMMIT WORK; END IF; **END** --#SET TERMINATOR @ Rollback

Rollback --#SET TERMINATOR @ A ROLLBACK command is used to rollback the command CREATE PROCEDURE PROCEDURE\_NAME Transactions which are not saved in the database.

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

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> **BEGIN** ROLLBACK; COMMIT; END

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

SQL 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>

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()

**BEGIN** 

DECLARE EXIT HANDLER FOR SQLEXCEPTION

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()

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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### Changelog

**Version Changed by Change Description** 2022-10-04 1.0 D.M.Naidu Initial Version

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