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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			
Stored	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
Procedures	END //	The default terminator for a stored procedure is semicolon (·). To set a different terminator we use	SELECT * FROM PETSALE;

DELIMITER;

ROLLBACK command is semicolon (;).

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

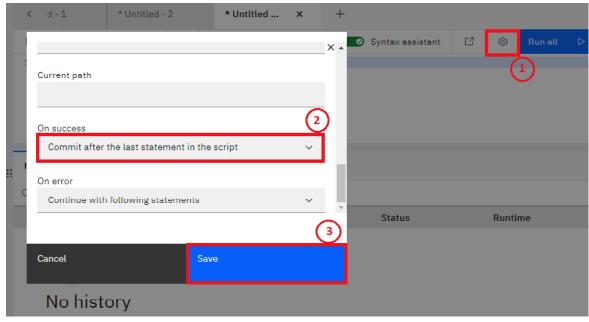
semicolon (;). To set a different terminator we use

as \$\$ or //.

DELIMITER clause followed by the terminator such | END //

DELIMITER;

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

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

#### Transactions with MySQL

Age INT); A COMMIT command is used to persist the changes in START TRANSACTION; COMMIT; the database. Commit INSERT INTO employee( ID, Name, City, Salary,
Age) VALUES( 1, 'Priyanka pal', 'Nasik',
36000, 21), (2, 'Riya chowdary', 'Bangalor', command The default terminator for a COMMIT command is semicolon (;). 82000, 29); 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. A ROLLBACK command is used to rollback the For MySQL use the command "SET ROLLBACK; transactions which are not saved in the database. autocommit = 0;" Rollback command INSERT INTO employee VALUES (3, 'Swetha The default terminator for a ROLLBACK Tiwari', 'Kanpur', 38000, 38); command is semicolon (;). SELECT \*FROM employee; ROLLBACK; SELECT \*FROM employee;

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

A COMMIT command is used to persist the changes in --#SET TERMINATOR @ CREATE PROCEDURE -#SET TERMINATOR @ Commit TRANSACTION\_ROSE LANGUAGE SQL MODIFIES SQL command the database. CREATE PROCEDURE PROCEDURE NAME The default terminator for a COMMIT command BEGIN **BEGIN** is semicolon (;). COMMIT; DECLARE SQLCODE INTEGER DEFAULT 0;
DECLARE retcode INTEGER DEFAULT 0; END 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; ELSE COMMIT WORK; END IF;

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```
--#SET TERMINATOR @ CREATE PROCEDURE
                                                                                                                TRANSACTION_ROSE LANGUAGE SQL MODIFIES SQL
                                                                                                                DATA
                                                                                                                BEGIN
                                                                                                                DECLARE SQLCODE INTEGER DEFAULT 0;
                                                                                                                DECLARE retcode INTEGER DEFAULT 0;
                --#SET TERMINATOR @
                                                                                                                DECLARE CONTINUE HANDLER FOR SQLEXCEPTION
                                                                                                                SET retcode = SQLCODE;
                CREATE PROCEDURE PROCEDURE NAME
                                                                                                                UPDATE BankAccounts
                                                                A ROLLBACK command is used to rollback the
                                                                                                                SET Balance = Balance-200
WHERE AccountName = 'Rose';
                                                                transactions which are not saved in the database.
Rollback
                ROLLBACK;
command
                                                                                                                UPDATE BankAccounts
                                                                The default terminator for a ROLLBACK
                COMMIT:
                                                                                                                SET Balance = Balance-300
                                                                command is semicolon (;).
                END
                                                                                                                WHERE AccountName = 'Rose';
                                                                                                                IF retcode < 0 THEN
                                                                                                                ROLLBACK WORK;
                                                                                                                COMMIT WORK;
                                                                                                                END IF;
                                                                                                                END
MySQL Transactions using Stored Procedure
                                                                                                                DELIMITER //
                                                                                                                CREATE PROCEDURE TRANSACTION ROSE()
                                                                                                                BEGIN
                                                                                                                DECLARE EXIT HANDLER FOR SQLEXCEPTION
                DELIMITER //
                                                                                                                BEGIN
                                                                                                                ROLLBACK;
                CREATE PROCEDURE PROCEDURE_NAME
                                                                                                                RESIGNAL;
                                                                A COMMIT command is used to persist the changes in END;
                BEGIN
                                                                the database.
                                                                                                                START TRANSACTION:
Commit
                COMMIT;
                                                                                                                UPDATE BankAccounts
command
                                                                The default terminator for a COMMIT command
                                                                                                                SET Balance = Balance-200
                END //
                                                                is semicolon (;).
                                                                                                                WHERE AccountName = 'Rose';
                DELIMITER;
                                                                                                                UPDATE BankAccounts
                                                                                                                SET Balance = Balance-300
                                                                                                                WHERE AccountName = 'Rose';
                                                                                                                COMMIT;
                                                                                                                END //
                                                                                                                DELIMITER;
                                                                                                                DELIMITER //
                                                                                                                CREATE PROCEDURE TRANSACTION ROSE()
                                                                                                                BEGIN
                DELIMITER //
                                                                                                                DECLARE EXIT HANDLER FOR SQLEXCEPTION
                CREATE PROCEDURE PROCEDURE_NAME
                                                                                                                ROLLBACK;
                                                                                                                RESIGNAL;
                BEGIN
                                                                A ROLLBACK command is used to rollback the
                                                                                                                END;
                ROLLBACK;
                                                                transactions which are not saved in the database.
Rollback
                                                                                                                START TRANSACTION:
                                                                                                                UPDATE BankAccounts
command
                COMMIT;
                                                                The default terminator for a ROLLBACK
                                                                                                                SET Balance = Balance-200
                                                                command is semicolon (;).
                                                                                                                WHERE AccountName = 'Rose';
                END //
                                                                                                                UPDATE BankAccounts
                DELIMITER;
                                                                                                                SET Balance = Balance-300
                                                                                                                WHERE AccountName = 'Rose';
                                                                                                                COMMIT;
                                                                                                                END //
                                                                                                                DELIMITER;
```

END

## Author(s)

### D.M Naidu



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