

SQL Cheat Sheet: Views, Stored Procedures and Transactions



Views

Topic	Syntax	Description	Example
Create View	<pre>CREATE VIEW view_name AS SELECT column1, column2, ... FROM table_name WHERE condition;</pre>	A CREATE VIEW is an alternative way of representing data that exists in one or more tables.	<pre>CREATE VIEW EMPSALARY AS SELECT EMP_ID, F_NAME, L_NAME, B_DATE, SEX, SALARY FROM EMPLOYEES;</pre>
Update a View	<pre>CREATE OR REPLACE VIEW view_name AS SELECT column1, column2, ... FROM table_name WHERE condition;</pre>	The CREATE OR REPLACE VIEW command updates a view.	<pre>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;</pre>
Drop a View	<pre>DROP VIEW view_name;</pre>	Use the DROP VIEW statement to remove a view from the database.	<pre>DROP VIEW EMPSALARY;</pre>

Stored Procedures in IBM Db2 using SQL

Stored Procedures	<pre>--#SET TERMINATOR @ CREATE PROCEDURE PROCEDURE_NAME</pre>	A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.	<pre>--#SET TERMINATOR @ CREATE PROCEDURE RETRIEVE_ALL</pre>
	<pre>LANGUAGE SQL BEGIN END @</pre>		<pre>LANGUAGE SQL READS SQL DATA DYNAMIC RESULT SETS 1 BEGIN DECLARE C1 CURSOR WITH RETURN FOR SELECT * FROM PETSAL; OPEN C1; END @</pre>

Stored Procedures in MySQL using phpMyAdmin

Stored Procedures	<pre>DELIMITER //</pre>	A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.	<pre>DELIMITER //</pre>
	<pre>CREATE PROCEDURE PROCEDURE_NAME BEGIN END //</pre>		<pre>CREATE PROCEDURE RETRIEVE_ALL() BEGIN SELECT * FROM PETSAL;</pre>

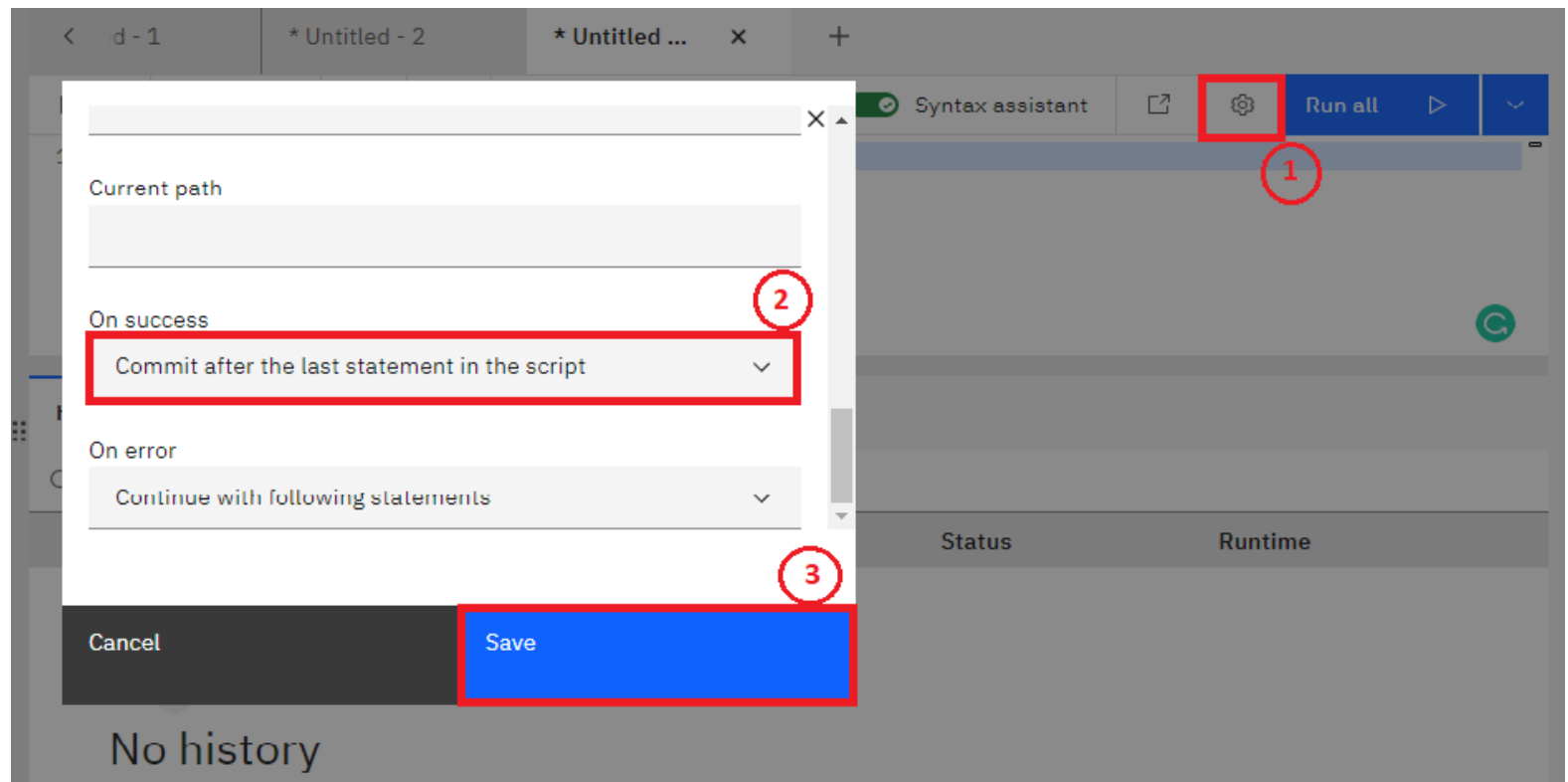
DELIMITER ;

DELIMITER clause followed by the terminator such as END // \$\$ or //.

DELIMITER ;

Transactions with Db2

Commit command	A COMMIT command is used to persist the changes in the database.	CREATE TABLE employee(ID INT, Name VARCHAR(20), City VARCHAR(20), Salary INT, Age INT);
	COMMIT; The default terminator for a COMMIT command is semicolon (;).	INSERT INTO employee(ID, Name, City, Salary, Age) VALUES(1, 'Priyanka pal', 'Nasik', 36000, 21), (2, 'Riya chowdary', 'Bangalore', 82000, 29); SELECT *FROM employee; COMMIT;
Rollback command	ROLLBACK; A ROLLBACK command is used to rollback the transactions which are not saved in the database.	As auto-commit is enabled by default, all transactions will be committed. We need to disable this option to see how rollback works.
	The default terminator for a ROLLBACK command is semicolon (;).	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 to save your changes!



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

Transactions with MySQL

Commit
command

COMMIT;

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);
```

START TRANSACTION;

```
INSERT INTO employee( ID, Name, City, Salary,
Age) VALUES( 1, 'Priyanka pal', 'Nasik', 36000,
21), (2, 'Riya chowdary', 'Bangalor', 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. For MySQL use the command "SET autocommit = 0;"

Rollback
command

ROLLBACK;

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 (;).

```
INSERT INTO employee VALUES (3, 'Swetha Tiwari',
'Kanpur', 38000, 38);

SELECT *FROM employee;
ROLLBACK;
SELECT *FROM employee;
```

Db2 Transactions using Stored Procedure

Commit
command

```
--#SET TERMINATOR @

CREATE PROCEDURE PROCEDURE_NAME

BEGIN

COMMIT;

END
@
```

A COMMIT command is used to persist the changes in the database.

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

```
--#SET TERMINATOR @ CREATE PROCEDURE
TRANSACTION_ROSE LANGUAGE SQL MODIFIES 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;

ELSE
COMMIT WORK;

END IF;

END
@
```

Rollback
command

```
--#SET TERMINATOR @

CREATE PROCEDURE PROCEDURE_NAME

BEGIN

ROLLBACK;

COMMIT;

END
@
```

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 (;).

```
--#SET TERMINATOR @ CREATE PROCEDURE
TRANSACTION_ROSE LANGUAGE SQL MODIFIES SQL DATA

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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;

END
@

```

MySQL Transactions using Stored Procedure

Commit
command

```

DELIMITER //
CREATE PROCEDURE PROCEDURE_NAME
BEGIN
COMMIT;
END //
DELIMITER ;

```

A COMMIT command is used to persist the changes in the database.

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

```

DELIMITER //
CREATE PROCEDURE TRANSACTION_ROSE()
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
ROLLBACK;
RESIGNAL;
END;
START TRANSACTION;
UPDATE BankAccounts
SET Balance = Balance-200
WHERE AccountName = 'Rose';

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

COMMIT;

END //

```

Rollback
command

```

DELIMITER //
CREATE PROCEDURE PROCEDURE_NAME
BEGIN
ROLLBACK;
COMMIT;
END //
DELIMITER ;

```

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 (;).

```

DELIMITER ;
DELIMITER //
CREATE PROCEDURE TRANSACTION_ROSE()
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DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
ROLLBACK;
RESIGNAL;
END;
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

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