11/23/23, 1:00 AM about:blank

SQL Cheat Sheet: Views, Stored Procedures and Transactions

Views

, 10,110			
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			
Stored Procedures	PROCEDURE_NAME LANGUAGE BEGIN END @	A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.	#SET TERMINATOR @ CREATE PROCEDURE RETRIEVE_ALL
			LANGUAGE SQL READS SQL DATA
			DYNAMIC RESULT SETS 1 BEGIN
		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 '@'.	DECLARE C1 CURSOR WITH RETURN FOR
			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. The default terminator for a stored procedure is semicolon (;). To set a different terminator we use	DELIMITER //
	CREATE PROCEDURE PROCEDURE_NAME		CREATE PROCEDURE RETRIEVE_ALL()
	BEGIN		BEGIN
	END //		SELECT * FROM PETSALE;
	DELIMITER;		END //

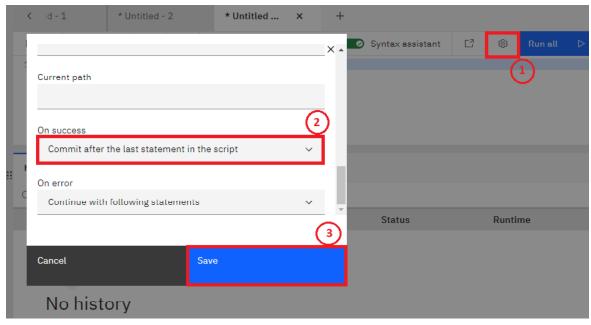
command is semicolon (;).

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 COMMIT; INSERT INTO employee(ID, Name, City, Salary, Age) VALUES(1, 'Priyanka pal', 'Nasik', 36000, 21), (2, 'Riya chowdary', 'Ba 82000, 29); The default command terminator SELECT *FROM employee; COMMIT; for a 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 $\hbox{command is}\\$ 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 rollback the transactions save your changes! which are not saved in the database. The default terminator for a ROLLBACK

DELIMITER;

as \$\$ or //.

about:blank 1/4 11/23/23. 1:00 AM about:blank



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

Age INT);

END IF;

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

Transactions with MySQL

A COMMIT command is used to persist the changes in START TRANSACTION; COMMIT; 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. For MySQL use the command "SET A ROLLBACK command is used to rollback the 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 $\operatorname{\mathtt{--\#SET}}$ TERMINATOR @ CREATE PROCEDURE -#SET TERMINATOR @ Commit TRANSACTION_ROSE LANGUAGE SQL MODIFIES SQL command the database. CREATE PROCEDURE PROCEDURE_NAME DATA 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; COMMIT WORK;

11/23/23. 1:00 AM about:blank

```
--#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 TERMINATOR @
                                                                                                                  SET retcode = SOLCODE:
                 CREATE PROCEDURE PROCEDURE NAME
                                                                                                                  UPDATE BankAccounts
                 BEGIN
                                                                  A ROLLBACK command is used to rollback the
                                                                                                                  SET Balance = Balance-200
                                                                 transactions which are not saved in the database.
                                                                                                                  WHERE AccountName = 'Rose';
Rollback
                 ROLLBACK;
command
                                                                 The default terminator for a ROLLBACK
                                                                                                                  UPDATE BankAccounts
                 COMMIT;
                                                                                                                  SET Balance = Balance-300
WHERE AccountName = 'Rose';
                                                                 command is semicolon (;).
                 END
                                                                                                                  IF retcode < 0 THEN
                                                                                                                  ROLLBACK WORK;
                                                                                                                  ELSE
                                                                                                                  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.
Commit
                                                                                                                   START TRANSACTION;
                 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
                                                                                                                   BEGIN
                 CREATE PROCEDURE PROCEDURE NAME
                                                                                                                  ROLLBACK:
                                                                                                                  RESIGNAL;
                 BEGIN
                                                                                                                  END;
                                                                  A ROLLBACK command is used to rollback the
                 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



about:blank 3/4

11/23/23, 1:00 AM about:blank

Changelog

Date Version Changed by Change Description

2022-10-04 1.0 D.M.Naidu Initial Version

about:blank 4/4