|  |
| --- |
| CREATE TABLE BOOKS\_AUD ( |
|  |  | EVENT\_ID INT(11) NOT NULL AUTO\_INCREMENT, |
|  |  | EVENT\_DATE DATETIME NOT NULL, |
|  |  | EVENT\_TYPE VARCHAR(10) DEFAULT NULL, |
|  |  | BOOK\_ID INT(11) NOT NULL, |
|  |  | OLD\_TITLE VARCHAR(255) NOT NULL, |
|  |  | NEW\_TITLE VARCHAR(255) NOT NULL, |
|  |  | OLD\_PUBYEAR INT(4) NOT NULL, |
|  |  | NEW\_PUBYEAR INT(4) NOT NULL, |
|  |  | OLD\_BESTSELLER BOOLEAN, |
|  |  | NEW\_BESTSELLER BOOLEAN, |
|  |  | PRIMARY KEY (EVENT\_ID) |
|  |  | ); |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELIMITER $$ |
|  |  |  |
|  |  | CREATE TRIGGER BOOKS\_INSERT AFTER INSERT ON BOOKS |
|  |  | FOR EACH ROW |
|  |  | BEGIN |
|  |  | INSERT INTO BOOKS\_AUD  (EVENT\_DATE,EVENT\_TYPE,BOOK\_ID,NEW\_TITLE,NEW\_PUBYEAR,NEW\_BESTSELLER) |
|  |  | VALUE(CURTIME(), 'INSERT', NEW.BOOK\_ID, NEW.TITLE, NEW.PUBYEAR, NEW.BESTSELLER); |
|  |  | END $$ |
|  |  |  |
|  |  | DELIMITER ; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | INSERT INTO BOOKS (BOOK\_ID, TITLE, PUBYEAR, BESTSELLER) |
|  |  | VALUES (6, 'Title of New Book', 1990, 0); |
|  |  |  |
|  |  | COMMIT; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELIMITER $$ |
|  |  |  |
|  |  | CREATE TRIGGER BOOKS\_DELETE AFTER DELETE ON BOOKS |
|  |  | FOR EACH ROW |
|  |  | BEGIN |
|  |  | INSERT INTO BOOKS\_AUD (EVENT\_DATE, EVENT\_TYPE, BOOK\_ID) |
|  |  | VALUE(CURTIME(), 'DELETE', OLD.BOOK\_ID); |
|  |  | END $$ |
|  |  |  |
|  |  | DELIMITER ; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELETE FROM BOOKS WHERE BOOK\_ID = 6; |
|  |  |  |
|  |  | COMMIT; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELIMITER $$ |
|  |  |  |
|  |  | CREATE TRIGGER BOOKS\_UPDATE AFTER UPDATE ON BOOKS |
|  |  | FOR EACH ROW |
|  |  | BEGIN |
|  |  | INSERT INTO BOOKS\_AUD (EVENT\_DATE, EVENT\_TYPE, BOOK\_ID, NEW\_TITLE, NEW\_PUBYEAR, |
|  |  | NEW\_BESTSELLER, OLD\_TITLE, OLD\_PUBYEAR, OLD\_BESTSELLER) |
|  |  | VALUE  (CURTIME(), 'UPDATE', OLD.BOOK\_ID, NEW.TITLE, NEW.PUBYEAR, NEW.BESTSELLER, |
|  |  | OLD.TITLE, OLD.PUBYEAR, OLD.BESTSELLER); |
|  |  | END $$ |
|  |  |  |
|  |  | DELIMITER ; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | UPDATE BOOKS SET TITLE = 'Other title of New Book' WHERE BOOK\_ID = 5; |
|  |  |  |
|  |  | COMMIT; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | SELECT \* FROM BOOKS\_AUD; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | CREATE TABLE READERS\_AUD ( |
|  |  | EVENT\_ID INT(11) NOT NULL AUTO\_INCREMENT, |
|  |  | EVENT\_DATE DATETIME NOT NULL, |
|  |  | EVENT\_TYPE VARCHAR(10) DEFAULT NULL, |
|  |  | READER\_ID INT(11) NOT NULL, |
|  |  | OLD\_FIRSTNAME VARCHAR(255) NOT NULL, |
|  |  | NEW\_FIRSTNAME VARCHAR(255) NOT NULL, |
|  |  | OLD\_LASTNAME VARCHAR(255) NOT NULL, |
|  |  | NEW\_LASTNAME VARCHAR(255) NOT NULL, |
|  |  | OLD\_PESELID VARCHAR(11) NOT NULL, |
|  |  | NEW\_PESELID VARCHAR(11) NOT NULL, |
|  |  | OLD\_VIPLEVEL VARCHAR(20) NOT NULL, |
|  |  | NEW\_VIPLEVEL VARCHAR(20) NOT NULL, |
|  |  | PRIMARY KEY (EVENT\_ID) |
|  |  | ); |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELIMITER $$ |
|  |  |  |
|  |  | CREATE TRIGGER READERS\_INSERT AFTER INSERT ON READERS |
|  |  | FOR EACH ROW |
|  |  | BEGIN |
|  |  | INSERT INTO READERS\_AUD (EVENT\_DATE, EVENT\_TYPE, READER\_ID, NEW\_FIRSTNAME, NEW\_LASTNAME, |
|  |  | NEW\_PESELID, NEW\_VIPLEVEL) |
|  |  | VALUE(CURTIME(), 'INSERT', NEW.READER\_ID, NEW.FIRSTNAME, NEW.LASTNAME, NEW.PESELID, |
|  |  | NEW.VIP\_LEVEL); |
|  |  | END $$ |
|  |  |  |
|  |  | DELIMITER ; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | INSERT INTO READERS (READER\_ID, FIRSTNAME, LASTNAME, PESELID, VIP\_LEVEL) |
|  |  | VALUES (6, 'Jan', 'Kowalski', '90021497531', 'Standard customer'); |
|  |  |  |
|  |  | COMMIT; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELIMITER $$ |
|  |  |  |
|  |  | CREATE TRIGGER READERS\_DELETE AFTER DELETE ON READERS |
|  |  | FOR EACH ROW |
|  |  | BEGIN |
|  |  | INSERT INTO READERS\_AUD (EVENT\_DATE, EVENT\_TYPE, READER\_ID) |
|  |  | VALUE(CURTIME(), 'DELETE', OLD.READER\_ID); |
|  |  | END $$ |
|  |  |  |
|  |  | DELIMITER ; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELETE FROM READERS WHERE READER\_ID = 6; |
|  |  |  |
|  |  | COMMIT; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | DELIMITER $$ |
|  |  |  |
|  |  | CREATE TRIGGER READERS\_UPDATE AFTER UPDATE ON READERS |
|  |  | FOR EACH ROW |
|  |  | BEGIN |
|  |  | INSERT INTO READERS\_AUD (EVENT\_DATE, EVENT\_TYPE, READER\_ID, NEW\_FIRSTNAME, NEW\_LASTNAME, |
|  |  | NEW\_PESELID, NEW\_VIPLEVEL, OLD\_FIRSTNAME, OLD\_LASTNAME, |
|  |  | OLD\_PESELID, OLD\_VIPLEVEL) |
|  |  | VALUE(CURTIME(), 'UPDATE', OLD.READER\_ID, NEW.FIRSTNAME, NEW.LASTNAME, |
|  |  | NEW.PESELID, NEW.VIP\_LEVEL, OLD.FIRSTNAME, OLD.LASTNAME, |
|  |  | OLD.PESELID, OLD.VIP\_LEVEL); |
|  |  | END $$ |
|  |  |  |
|  |  | DELIMITER ; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | UPDATE READERS SET FIRSTNAME = 'Steven' |
|  |  | WHERE READER\_ID = 5; |
|  |  |  |
|  |  | COMMIT; |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | SELECT \* FROM READERS\_AUD; |