IN605 Week 9 Lab 1 Exercises

These exercises are done on Maria in your database *username*\_in605

# Triggers

## Create a Message Hash

### Create

* CREATE TABLE message(  
   author VARCHAR(100) NOT NULL,   
   message MEDIUMBLOB NOT NULL,   
   message\_hash CHAR(50) NOT NULL PRIMARY KEY  
  ) ENGINE=INNODB;
* CREATE TRIGGER message\_hash   
   BEFORE INSERT ON message   
  FOR EACH ROW SET NEW.message\_hash = sha1(NEW.message);

This is a one 1

### Test

* INSERT INTO message (author, message)   
   VALUES (‘Me’,’This is my message’);
* Select \* from message;
* SELECT SHA1('This is my message');

## Trigger with a variable

* CREATE TABLE account (  
  acct\_num INT,   
  amount DECIMAL(10,2)  
  );
* CREATE TRIGGER ins\_sum   
  BEFORE INSERT ON account   
  FOR EACH ROW SET @sum = @sum + NEW.amount;
* SET @sum = 0;
* INSERT INTO account VALUES(137,14.98),   
  (141,1937.50),   
  (97,-100.00);
* SELECT @sum AS 'Total amount';

Stop before going on with view

# Views

* CREATE TABLE t (qty INT, price INT);
* INSERT INTO t VALUES(3, 50), (2,100),(50,32);
* CREATE VIEW v AS SELECT qty, price, qty\*price AS value FROM t;
* SELECT \* FROM v;

# On your bookRating database in SQLite.

Create a view that joins all three tables together, select bID, title, published, genre, reviewers name, ratings and ratingdate

How much easier would that have made your worksheet!

# Index

## Create an index while creating the table

* CREATE TABLE employee\_records   
   (name VARCHAR(50),   
   employee\_ID INT,  
   INDEX (employee\_ID)   
  ) ;

## Create a table, then index later

* CREATE TABLE employee\_records2 (  
  name VARCHAR(50),   
  employee\_ID INT) ;
* CREATE INDEX id\_index ON employee\_records2(employee\_ID)