

## CSE 111 – DATABASE SYSTEMS

Lab 8, Nov 1, 2012

In this lab you will learn how to operate with triggers in SQLite:

1. Create a trigger that for each new **orders** entry will automatically fill the **o\_orderdate** with today's date (`DATETIME('NOW')`).
2. Create a trigger that will add a warning line in the comment attribute of the **customer** table each time **c\_acctbal** will be updated to a negative value. Also, create a trigger that will remove that warning if the value will go back positive.
3. Create a trigger that will update the attribute **o\_orderpriority** to **HIGH** each time a new **lineitem** tuple is added to or deleted from that order.
4. Create a table **orderlog** with the following attributes:

```
orderlog (  
  t_logkey INTEGER PRIMARY KEY,  
  t_commandname VARCHAR(25),  
  t_commanddate DATE,  
  t_orderkey INTEGER NOT NULL,  
  t_totalprcnew DECIMAL(8, 2) NOT NULL  
);
```

Create 3 triggers that will generate a new tuple for this table each time a new order is added, removed or updated. **t\_commandname** should reflect the command that was run (i.e. **DELETE**, **INSERT** or **UPDATE**), **t\_commanddate** should correspond to the time of running the command, **t\_orderkey** – the order key being edited and **t\_totalprcnew** the new price of the order (0 if the order has been deleted).

You are required to submit a file containing the created triggers.