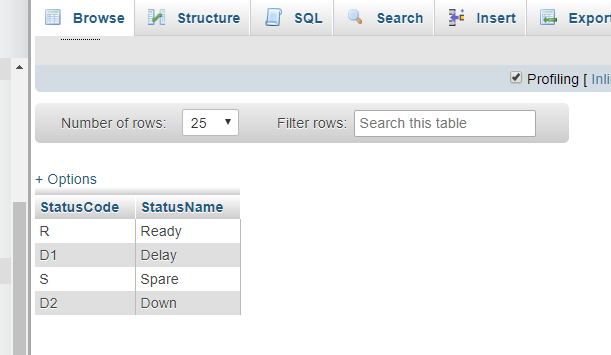
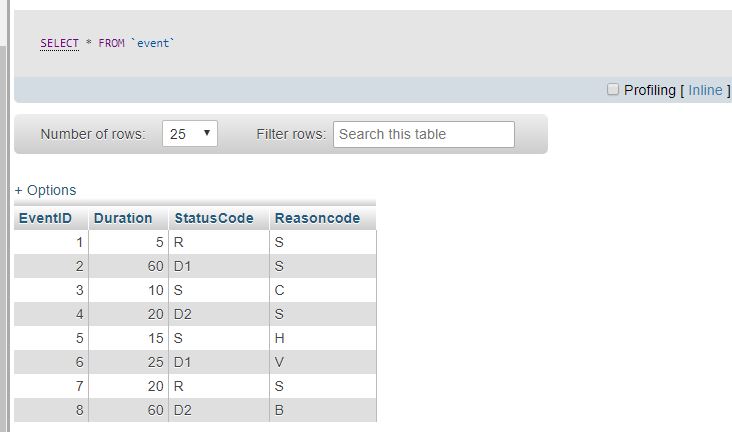
**LAB NO# 3**

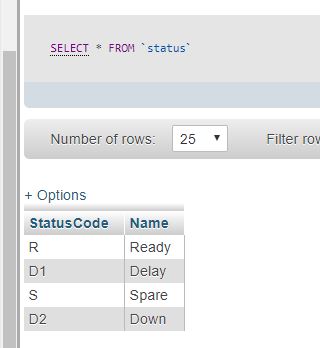
**Objective:** To learn query execution in OLTP databases.

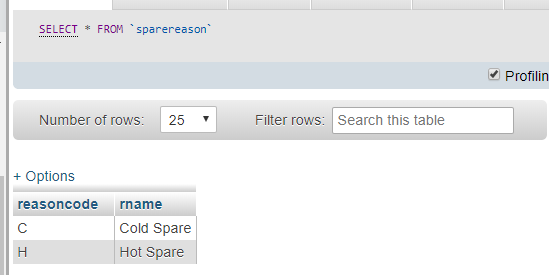
An organization has a main data table that lists events. Each event has a series of fields including duration, reason code and status. The OLTP system has a table of statuses with attributes status code and Name and there is a common field between the main table (status code), which allows the organization to print the status name rather than the code. There are four statuses (ready, delay, spare and down) and there are a range of reasons associated with each status with reason codes. It is possible for the same reason code to exist in two statuses (e.g. delay maintenance and down maintenance). For some reason, the source database has four tables of reasons (one for each status). Each of these has a field which links to the main reason code. The organization wishes to do the following: When the main table record status is ‘delay’, then retrieve the name in the ‘delay’ table which corresponds to the main table delay code. When the status is ‘down’, do the same thing but look up the name in the ‘down’ table.

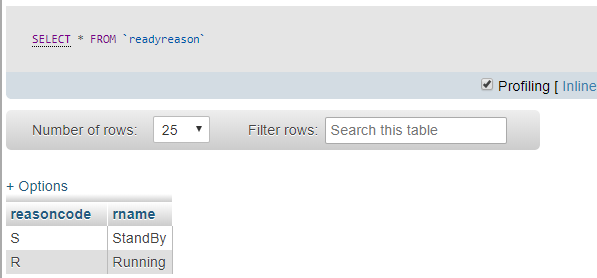
**Create Tables:**

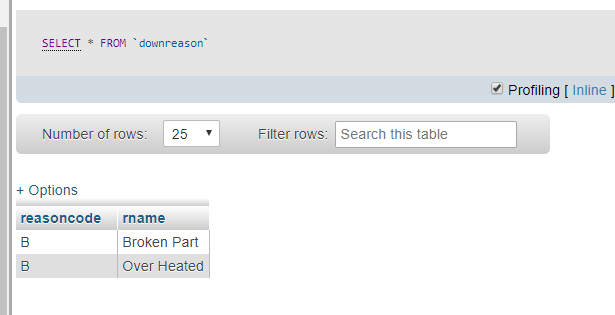












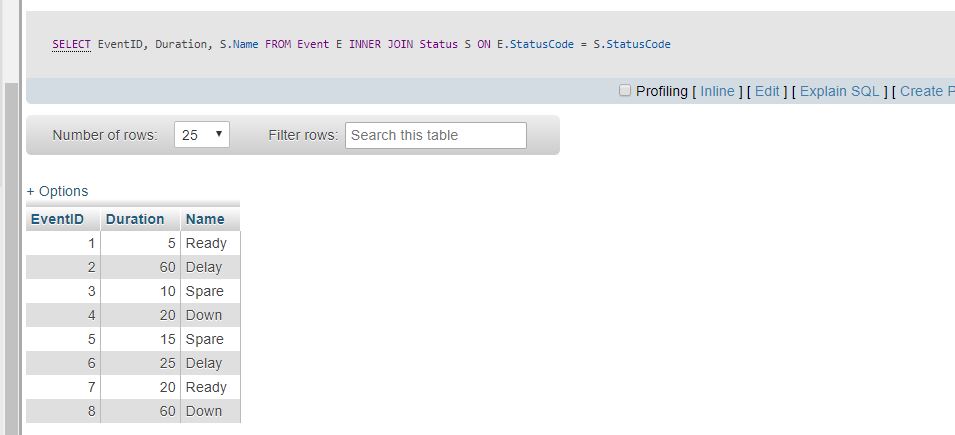
**DelayReason:**



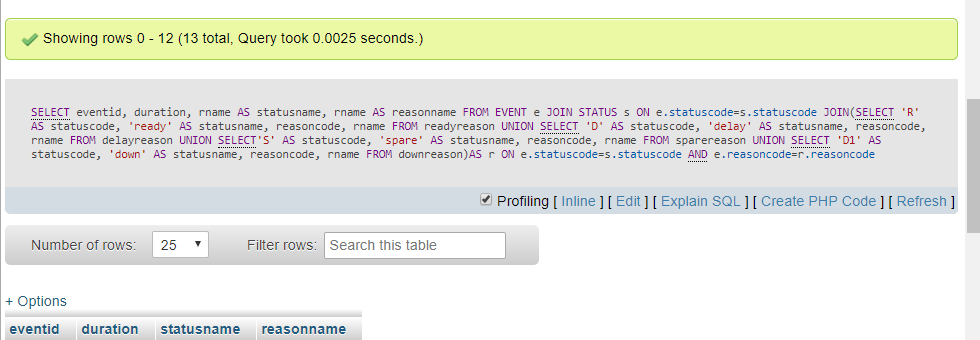
**InnerJoin:**

Inner join to return status name.

**Query:** [SELECT](http://localhost/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html) EventID, Duration, S.Name FROM Event E INNER JOIN Status S ON E.StatusCode = S.StatusCode



**Query:**



SELECT eventid, duration, rname AS statusname, rname AS reasonname FROM EVENT e JOIN STATUS s ON e.statuscode=s.statuscode

JOIN(SELECT 'R' AS statuscode, 'ready' AS statusname, reasoncode, rname FROM readyreason UNION SELECT 'D' AS statuscode, 'delay' AS

statusname, reasoncode, rname FROM delayreason UNION SELECT'S' AS statuscode, 'spare' AS statusname, reasoncode, rname FROM sparereason UNION

SELECT 'D1' AS statuscode, 'down' AS statusname, reasoncode, rname FROM downreason)AS r ON e.statuscode=s.statuscode AND

e.reasoncode=r.reasoncode;

