**Topic: Stored procedures**

**Class Participation for Week 6**

**Learning objectives:**

1. Practice writing stored procedures.
2. Practice more SQL queries.

**Instruction:** Submit your answers for Q1.a-Q1.c

Execute suppliers\_supply\_parts.sql in MySQL workbench to generate the database “supplierparts”.

Suppliers(sid int, sname VARCHAR(30), address VARCHAR(50), primary key(sid)); this table stores information about suppliers.

Parts(pid int, pname VARCHAR(30), color VARCHAR(10), primary key(pid)); this table stores information about parts.

Catalog(sid int, pid int, cost decimal(10,0), primary key(sid,pid), foreign key(pid) references Parts(pid), foreign key(sid) references Suppliers(sid)); this table stores information about which suppliers supply which parts for how much as indicated in the cost column.

1. Write a stored procedure for each question below. See the example numParts.sql which implements the stored procedure for question a. Do not list other attributes not requested in the questions as part of your results.
2. numparts() returns the number of parts in the Parts table.

How to call this stored procedure from MySQL Workbench?

call numparts();

**DROP procedure if exists numParts;**

**CREATE PROCEDURE numParts()**

**Select COUNT(p.pid) as numParts**

**From Parts p;**

**call numParts();**

1. suppliersWithoutParts() lists suppliers who do not supply any part. Shows only sid and sname of these suppliers.

Hint: This is similar to the query to find employees who do not work.

How to call this stored procedure from MySQL Workbench?

call suppliersWithoutParts();

**DROP procedure if exists suppliersWithoutParts;**

**Create procedure suppliersWithoutParts()**

**select S.sid, S.sname**

**From suppliers S left join Catalog C on c.sid = s.sid**

**where c.pid is null;**

**call suppliersWithoutParts();**

1. redgreenSuppliers() returns distinct sids and snames of suppliers who supply a red part and a green part.

Hint: This is similar to the query to find people who works in both Production and Maintenance companies

How to call this stored procedure from MySQL Workbench?

call redgreenSuppliers();

There are 15 suppliers.

**DROP procedure if exists redGreenSuppliers;**

**Create procedure redGreenSuppliers()**

**select distinct S.sid, S.sname**

**From suppliers S inner join Catalog C on s.sid = c.sid inner join Parts p on p.pid = c.pid**

**where p.color = "green" or p.color = "red";**

**call redGreenSuppliers();**

1. whosupplycolor(partcolor) returns distinct *sids* and *snames* of suppliers who supply any of the specified partcolor. Don’t list the same sid and sname values more than one time.

How to call this stored procedure from MySQL Workbench?

call whosupplycolor('red,black');

There are 15 suppliers.