**Topic: Stored procedures**

**Learning objectives:**

1. Practice writing stored procedures to prepare for the term project.
2. Practice more SQL queries.

**Instruction:**

1. Each team member runs suppliers_supply_parts.sql in MySQL workbench to generate the database "supplierparts" in your own MySQL server.

   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.

2. The team together writes a stored procedure for each question below in the shared Google Docs for your team.

   Each team member makes sure that you can run the stored procedure for each question. Submit the stored procedures for the question b and the question d. Name your stored procedure for question b as <netid>-b.sql. Name your stored procedure for question d as <netid>-d.sql. The <netid> is to be replaced with your Iowa State netid. 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.

   a. numparts() returns the number of parts in the Parts table.
      How to call this stored procedure from MySQL Workbench?
      call numparts();

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

      Hint: This is similar to the query from Tuesday class participation.
      How to call this stored procedure from MySQL Workbench?
      call suppliersWithoutParts();

   c. 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.

d. redgreenSuppliers() returns distinct sids and snames of suppliers who supply a red part and a green part.
How to call this stored procedure from MySQL Workbench?
call redgreenSuppliers();

There are 15 suppliers.