# CSC6341 Database Management Systems

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### Module 3 – Assignment for SQL Queries

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# Objectives

- Be able to write advanced SQL queries and run on real database systems.

- Be able to use built-in database functions to find information about database and perform calculation.

# Key Ideas

- SQL queries

- Built-in functions.

# Questions

## MySQL Built-in Functions

1. Use MySQL built-in functions to find out: username, database name, current date and time.

2. Use MySQL built-in functions to convert decimal 34 to binary number.

3. Use MySQL built-in functions to calculate 2 raised to power of 4.

4. Use MySQL built-in functions to find out the last auto-increment sequence number.

## SQL Queries

5. Basic Queries:

   Read Chapter 7 (7.1 and 7.4) and study the example SQL queries in Chapter 8 (Section 8.6 SQL Facilities) of the textbook by C. J. Date. Write SQL database queries on the MySQL database to answer Questions 7.15, 7.16, 7.20, 7.24, 7.28, 7.29, and 7.30.

6. Advanced Queries:

   Questions 7.40-43, and 7.45. Note that use "by supplier S2" instead of S1 for 7.41

   Before writing queries, double-check your tables s, p, j and spj and make sure they have the same data records as given in the textbook. Submit your queries and the corresponding results returned from the MySQL database to Canvas. Save your work into a single text file.

# Answers

```
7.40
+-------+
| j_num |
+-------+
| J2    |
| J5    |
| J6    |
+-------+


7.41
+-------+
| j_num |
+-------+
| J6    |
+-------+


7.42
+-------+
| p_num |
+-------+
| P3    |
| P5    |
+-------+


7.43
+-------+
| s_num |
+-------+
| S2    |
+-------+


7.45
+--------+
| city   |
+--------+
| London |
| Paris  |
| Athens |
| Oslo   |
| Rome   |
+--------+
```