**Worksheet 5**

**MySQL Statements**

**CPSC 3555 - Spring 2018**

Section 1: Write the following MySQL Statements. For reference, you can use the MySQL Tutorial located here <https://dev.mysql.com/doc/refman/5.7/en/tutorial.html> or other online resources. You can also install MySQL locally on your machine if you want to test the statements.

1. Write a statement to create a database named IOT\_DATASTORE.

Mysql> create database [IOT\_DATASTORE]

1. Write a statement to create a table in the IOT\_DATASTORE called TEMPERATURE\_READINGS with the following rows and data types.

CREATE TABLE [TEMPERATURE\_READINGS](ROW\_ID INT(2) NOT NULL AUTO\_INCREMENT PRIMARY KEY, DEVICE\_ID VARCHAR(25), TEMPERATURE\_FAR FLOAT, TEMPERATURE\_CEL FLOAT, INSERT\_DATE DATE);

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Description** |
| ROW\_ID | Integer | This is the primary key, it cannot be null and should auto increment by 1 each time a row is entered |
| DEVICE\_ID | Varchar of 25 characters | This is a unique device id |
| TEMPERATURE\_FAR | Float | This is a temperature reading in Fahrenheit |
| TEMPERATURE\_CEL | Float | This is the same temperature reading in Celsius |
| INSERT\_DATE | Date Time | Timestamp of the data |

1. Write a statement to insert a row of data into the table. You can create your own values. You should not insert the ROW\_ID since it auto increments for each row added to the table. Only insert the other 4 data fields.

INSERT INTO TEMPERATURE\_READINGS

VALUES ( , IR021, 22.34, -10.56, 10/10/2013);

1. Write a statement to query all of the data from the table.

SELECT \* FROM TEMPERATURE\_READINGS;

1. Write a statement to show only the DEVICE\_ID and TEMPERATURE\_FAR and INSERT\_DATE data.

SELECT DEVICE\_ID, TEMPERATURE\_FAR, INSERT\_DATE from TEMPERATURE\_READINGS;

1. Write a statement to show the max TEMPERATURE\_CEL for each DEVICE\_ID.

SELECT MAX(TEMPERATURE\_CEL) FROM TEMPERATURE\_READINGS;