

# Worksheet 1

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For this worksheet we will be using the MySQL database management system to create some tables.

## Step one: Getting the software

If you are using a lab computer, MySQL is already installed. If you are using your own computer, instructions to install MySQL can be found on Moodle.

## Step two: Running the software

The best way to use this software is through the command prompt or terminal.

Execute the program by typing the following:

**mysql -u username -p**

You will need to replace “username” with your MySQL user name.

## Questions

1. Creates a database named **week3lab**.
2. Create a table named **q1**, this table should have two attributes: an integer named **id** that is the **primary key** and string of exactly 144 characters named **message**.
3. Add a new attribute to the table created in the previous question using the **alter** command. The new attribute should have the domain **time** and be named **attime**.
4. Write the command to **drop** the table created in Question 2.
5. Create a table named **item**, this table should have three attributes;
  - a. An integer named **itemid**
  - b. A string of exactly 25 characters named **itemname**
  - c. A double precision floating point number named **itemprice**

This table should also have the following constraints,

- a. **itemid** should be the primary key of the table.
  - b. **itemname** and **itemprice** cannot be null values.
  - c. **itemname** must be unique
6. Create a table named **stocklist**, this table should have three attributes
    - a. An integer named **itemid**
    - b. A string of exactly 40 characters named **shoplocation**
    - c. An integer value named **count**

This table should also have the following constraints:

- a. The combination of **itemid** and **shoplocation** should be the primary key of the table.

- b. The attribute **itemid** should be set up as a foreign key referencing the **itemid** attribute in the item table
- c. Appropriately set up on update and on delete reaction policies.

7. Insert two new items, with the following details:

<b>itemid</b>	<b>itemname</b>	<b>itemprice</b>
1	Macbook Pro 2019	3000.00
2	iMac 2020	4422.53

- 8. The price of iMac 2020 increased 10%. Make a change to the database to record this information.