Answers for Week 1 practice questions.

The answers to this week's questions are also available in a .sql file, which can be opened in a text editor like Notepad++ (Windows), gedit (Linux) or similar.

-- Part 1 - Basic SQL Queries - Invoices tables

-- Q1

SELECT * FROM CUSTOMER;

SELECT * FROM CUSTOMER WHERE CUSTSTATE = 'NSW';

SELECT * FROM CUSTOMER WHERE CUSTSTATE = 'NT';

SELECT * FROM CUSTOMER WHERE CUSTSTATE = 'QLD'; -- Note that this doesn't work. Why? Because the rows in the database are Qld, not QLD.

SELECT * FROM CUSTOMER WHERE UPPER(CUSTSTATE) = 'QLD'; -- This works because it first converts the CUSTSTATE column to UPPER case, before checking if it matches 'QLD'

-- Q2

SELECT * FROM ITEM;

SELECT * FROM ITEM WHERE ITEMPRICE> 600;

SELECT * FROM ITEM WHERE ITEMPRICE> 800;

-- Q3

SELECT * FROM ITEM WHERE ITEMPRICE > 600 ORDER BY ITEMDESC;

SELECT * FROM ITEM WHERE ITEMPRICE > 600 ORDER BY ITEMPRICE ASC; -- ASC will make the sort go from small -> large, which is the default

SELECT * FROM ITEM WHERE ITEMPRICE > 600 ORDER BY ITEMPRICE DESC; -- DESC will make the sort reverse, from large -> small

-- Q4

SELECT * FROM ITEM WHERE UPPER(ITEMDESC) LIKE '%SCREEN%';

SELECT * FROM ITEM WHERE UPPER(ITEMDESC) LIKE '%TUBE%';

SELECT * FROM ITEM WHERE UPPER(ITEMDESC) LIKE '%SCREEN%' OR UPPER(ITEMDESC) LIKE '%TUBE%';

SELECT * FROM ITEM WHERE (UPPER(ITEMDESC) LIKE '% SCREEN%' OR UPPER(ITEMDESC) LIKE '% TUBE%') AND ITEMPRICE > 400; -- Note the use of parentheses '(' to group the queries

SELECT * FROM ITEM WHERE (UPPER(ITEMDESC) LIKE '% SCREEN%' OR UPPER(ITEMDESC) LIKE '% TUBE%') AND ITEMPRICE < 500; -- Note the use of parentheses '(' to group the queries

-- O *

SELECT * FROM STUDENT;

-- Q6

SELECT STUDENT_NO, NAME FROM STUDENT;

SELECT NAME, TOTAL_UNITS FROM STUDENT;

-- Note how you can re-order the columns in your select statement

SELECT TOTAL_UNITS, STUDENT_NO, NAME FROM STUDENT;

-- Q7

-- Note that you can use where to filter on a column that isn't one you are selecting

SELECT NAME, TOTAL_UNITS, COORD_NO FROM STUDENT WHERE STUDENT_NO = 12345678;

SELECT NAME, TOTAL_UNITS AS COMPLETED, COORD_NO FROM STUDENT WHERE STUDENT NO = 12345678;