HIT234 – Week 1 Activities

Part 1 – Basic SQL Queries – Using Invoices tables from Database

These queries are to practice the basics of using the SQL syntax to get data out of a DB.

Questions:

1. Find all the customers in NSW. Try again but getting customers from the NT instead.

Find customers by state:

SELECT \* FROM customers WHERE state = 'NSW';

Now for NT:

SELECT \* FROM customers WHERE state = 'NT';

2. Find the description and price of items valued at $600 or more. Try with a value of $800

or more.

**Find items priced at $600 or more:**

SELECT description, price FROM items WHERE price >= 600;

Now for $800 or more:

SELECT description, price FROM items WHERE price >= 800;

3. Repeat the $600 query from the previous question, but this time sort the output by the

item’s description. Try sorting by the price. Now try sorting from most expensive to least

expensive.

**Sorting items priced at $600 or more:**

Sort by description:

SELECT description, price FROM items WHERE price >= 600 ORDER BY description;

Sort by price (ascending):

SELECT description, price FROM items WHERE price >= 600 ORDER BY price;

Sort by price (descending):

SELECT description, price FROM items WHERE price >= 600 ORDER BY price DESC;

4. List all the items that have `screen` in the description. Now list all that have `tube` in the

description. Now list all the items that have either `screen` or `tube` in the description.

**Find items with specific words in the description:**

Items with screen:

SELECT \* FROM items WHERE description LIKE '%screen%';

Items with tube:

SELECT \* FROM items WHERE description LIKE '%tube%';

Items with either screen or tube:

SELECT \* FROM items WHERE description LIKE '%screen%' OR description LIKE '%tube%';

5. List all the data in the `student` table.

**List all data in the student table:**

SELECT \* FROM student;

6. List all the rows from the `student` table, but this time filter down the columns so that

only the `student\_no` and `name` are returned. Now filter it to just the `name` and the

`total\_units` completed.

**Filter specific columns from student table:**

Only student\_no and name:

SELECT student\_no, name FROM student;

Only name and total\_units:

SELECT name, total\_units FROM student;

7. What is the name, total number of units completed and coordinator number of

student\_no 12345? Now do the same select, but rename the `total\_units` column in the

result to `completed`.

**Find details of student number 12345:**

SELECT name, total\_units, coordinator\_no FROM student WHERE student\_no = 12345;

Rename total\_units to completed:

SELECT name, total\_units AS completed, coordinator\_no FROM student WHERE student\_no = 12345;