DATA MANIPULATION LANGUAGE (DML)

Select

Select is our main tool for interrogating our database and extracting information. The syntax for SELECT

```
SELECT      {*|[column_name [AS column_alias]][,…]}
  FROM        table_name[table_alias][,…]
  [WHERE      condition]
  [GROUP BY   column_list] [HAVING condition]
  [ORDER BY   column_list]
```

As you can see there are a lot of options here. The SQL SELECT allows you to create sophisticated queries on the data in the database.

A simple implementation of select statement might be

```
SELECT * FROM students;
```

A slightly more advanced implementation of this might be

```
SELECT studentId, firstName, lastName
FROM students
WHERE studentId = 1;
```

Note that this selects the student id, first name and last name of the student who has the student id of 1. Notice the comma at the end of each column definition to separate the definitions.

Having looked at a simple example of select statements, we will now look at a more complex example. In this next example we have a student database consisting of 2 tables, 1 containing contact details and other being the table we just gave an example of.

```
SELECT students.student_id,first_name,last_name,student_address
FROM students,student_contact AS contact
WHERE students.student_id = contact.student_id;
```

As you can see, the above example displays the student id, first name, last name and address of the student who has the same student id on both the students and contact tables.