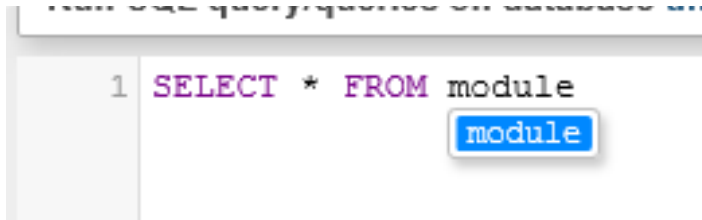


Week 13

1. Select all records from module table

The select query written was

```
SELECT * FROM MODULE
```



Result

+ Options						
			modulecode	modulename	hoursperweek	totalweeks
<input type="checkbox"/>	Edit	Copy	Delete	COM137	Maths	5 12
<input type="checkbox"/>	Edit	Copy	Delete	COM147	Database	3 24
<input type="checkbox"/>	Edit	Copy	Delete	COM179	Web Technologies	5 12

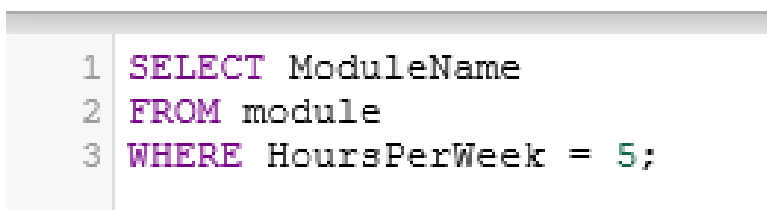
2. Get the module names where hours per week are 5

The Select query

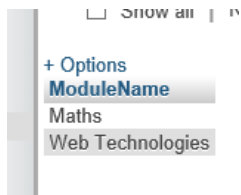
Select ModuleName

From module

Where HoursPerWeek = 5;



Result



3. Get the full names of students above 18 who are on the BScICT course

SELECT firstname, surname

FROM student

WHERE age > 18

AND coursename = 'BScICT';

Run SQL query/queries on database univers

```
1 SELECT firstname, surname
2 FROM student
3 WHERE age > 18
4 AND coursename = 'BScICT';
```

Result

A screenshot of a database interface showing a table with two columns: 'firstname' and 'surname'. The table contains two rows of data: 'Aine' and 'Whyte' in the first row, and 'Gary' and 'Gordon' in the second row. Above the table, there is a button labeled '+ Options'.

firstname	surname
Aine	Whyte
Gary	Gordon

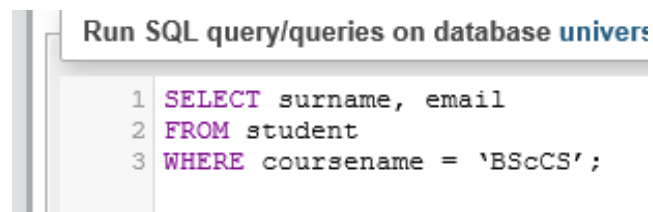
Exercise

- A. Get the surnames and emails on the BScCS course

```
SELECT surname, email
```

```
FROM student
```

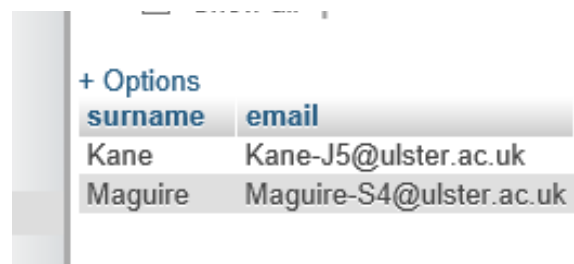
```
WHERE coursename = 'BScCS';
```



Run SQL query/queries on database university.

```
1 SELECT surname, email
2 FROM student
3 WHERE coursename = 'BScCS';
```

Result



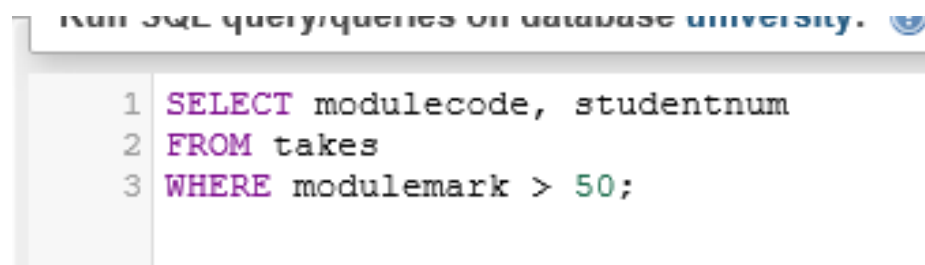
+ Options	
surname	email
Kane	Kane-J5@ulster.ac.uk
Maguire	Maguire-S4@ulster.ac.uk

- B. Get the module codes of students who got more than 50 in the module mark

```
SELECT modulecode, studentnum
```

```
FROM takes
```



















```
WHERE modulemark > 50;
```



Run SQL query/queries on database university.

```
1 SELECT modulecode, studentnum
2 FROM takes
3 WHERE modulemark > 50;
```

Result

+ Options				modulecode	studentnum
<div><div>←</div><div>T</div><div>→</div></div>					
<input type="checkbox"/>	 Edit	 Copy	 Delete	COM137	B00234567
<input type="checkbox"/>	 Edit	 Copy	 Delete	COM137	B00345678
<input type="checkbox"/>	 Edit	 Copy	 Delete	COM147	B00234567
<input type="checkbox"/>	 Edit	 Copy	 Delete	COM147	B00345678
<input type="checkbox"/>	 Edit	 Copy	 Delete	COM147	B00456789
<input type="checkbox"/>	 Edit	 Copy	 Delete	COM179	B00456789

- C. Get the Student numbers of students on the module coded COM147 whose coursework mark is below 60.

SELECT studentnum

FROM takes

WHERE modulecode = 'COM147';

Run SQL query/queries on database univers

```
1 SELECT studentnum
2 FROM takes
3 WHERE modulecode = 'COM147';
```

Result

☐ SHOW all

+ Options
studentnum
B00123456
B00234567
B00345678
B00456789
B00567890

D. Get the firstnames and emails for students aged above 18 and below 21

SELECT firtnames, emails

FROM student

WHERE age > 18 AND age < 21;

Run SQL query/queries on database **university**:

```
1 SELECT firstname, email
2 FROM student
3 WHERE age > 18 AND age < 21;
```

Result

+ Options

firstname	email
Jenna	Kane-J5@ulster.ac.uk
Aine	Whyte-A8@ulster.ac.uk
Gary	Gordon-G2@ulster.ac.uk

4. Get the Average age of all students

SELECT AVG(age)

FROM student;

Run SQL query/queries on data

```
1 SELECT AVG (age)
2 FROM student;|
```

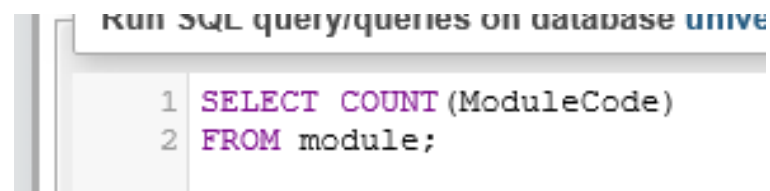
Result

+ Options
AVG(age)
19.8000

5. How Many modules are there?

```
SELECT COUNT(ModuleCode)
```

```
FROM module;
```



```
Run SQL query/queries on database UNIVe
1 SELECT COUNT (ModuleCode)
2 FROM module;
```

RESULT

+ Options
COUNT(ModuleCode)
3

6. How Many Students are on module COM147?

```
SELECT COUNT(studentnum)
```

```
FROM takes
```

```
WHERE ModuleCode = 'COM147';
```

Run SQL query/queries on database **university**:

```
1 SELECT COUNT (studentnum)
2 FROM takes
3 WHERE ModuleCode = 'COM147';|
```

Result

+ Options

COUNT(studentnum)

5

7. Get the names of the module along with the studentnum of students on that module.

SELECT ModuleName, Studentnum

FROM module, takes

WHERE module.ModuleCode = takes.ModuleCode;

```
1 SELECT ModuleName, Studentnum
2 FROM module, takes
3 WHERE module.modulecode = takes.modulecode;|
```

Result

☐ Show all | Number of rows.

+ Options

ModuleName	Studentnum
Maths	B00234567
Maths	B00345678
Database	B00123456
Database	B00234567
Database	B00345678
Database	B00456789
Database	B00567890
Web Technologies	B00123456
Web Technologies	B00456789
Web Technologies	B00567890

8. Get the names of Students with the names of their module and their module mark for students who got a module mark above 60.

```
SELECT Surname, ModuleName, ModuleMark
```

```
FROM Student, Takes, Module
```

```
WHERE student.Studentnum = takes.Studentnum
```

```
AND takes.ModuleCode = Module.ModuleCode
```

```
AND ModuleMark > 60;
```

```
1 SELECT Surname, ModuleName, ModuleMark
2 FROM Student, Takes, Module
3 WHERE student.Studentnum = takes.Studentnum
4 AND takes.ModuleCode = Module.ModuleCode
5 AND ModuleMark > 60;
```

Result

SHOW all | Number of rows: 25

+ Options

Surname	ModuleName	ModuleMark
Maguire	Maths	67
Kane	Database	65
Maguire	Database	81
Whyte	Database	63
Whyte	Web Technologies	85

9. Get the names and the hours per week of modules taken by student number 'B00456789'

SELECT ModuleName, HoursPerWeek

FROM module, takes

WHERE studentnum = 'B00456789'

AND Module.ModuleCode = takes.ModuleCode;

Run SQL query/queries on database university: ?

```

1 SELECT modulename, hoursperweek
2 FROM module, takes
3 WHERE studentnum = 'B00456789'
4 AND module.modulecode = takes.modulecode;|

```

Result

+ Options

modulename	hoursperweek
Database	3
Web Technologies	5

10. Get the names of students who takes modules that run for a total of 12 weeks

SELECT firstname, surname

FROM student, takes, module

WHERE totalweeks = 12

AND student.studentnum = takes.studentnum

AND takes.modulecode = module.modulecode;

```
1 SELECT firstname, surname
2
3 FROM student, takes, module
4
5 WHERE totalweeks = 12
6
7 AND student.studentnum = takes.studentnum
8
9 AND takes.modulecode = module.modulecode;
```

Result

+ Options

firstname	surname
-----------	---------

Jenna	Kane
-------	------

Sean	Maguire
------	---------

David	Hall
-------	------

Aine	Whyte
------	-------

Gary	Gordon
------	--------

11. Get module name, which has the number of students over three.

SELECT modulename

FROM module, takes

WHERE module.modulecode = takes.modulecode

Group by module.modulecode

HAVING COUNT(studentnum) > 3;

```
1 SELECT modulename
2 FROM module, takes
3 WHERE module.modulecode = takes.modulecode
4 Group by module.modulecode
5 HAVING COUNT(studentnum) > 3;
```

Result



+ Options
modulename
Database

12. Get module names, which has the average age of students over 20.

SELECT modulename

FROM module, takes, student

WHERE module.modulecode = takes.modulecode

AND takes.studentnum = student.studentnum

GROUP by takes.modulecode

HAVING AVG(age) > 20;

```
1 SELECT modulename
2 FROM module, takes, student
3 WHERE module.modulecode = takes.modulecode
4 AND takes.studentnum = student.studentnum
5 GROUP by takes.modulecode |
6 HAVING AVG (age) > 20;
```

Result

+ Options

modulename

Maths