Week 13

1. Select all records from module table

The select query written was

SELECT * FROM MODULE

```
1 SELECT * FROM module
                module
```

Result

+ Options

	modulecode	modulename	hoursperweek	totalweeks
Edit Copy Delete	COM137	Maths	5	12
Edit Copy Delete	COM147	Database	3	24
Edit Copy Delete	COM179	Web Technologies	5	12

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

The Select query

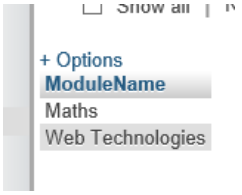
Select ModuleName

From module

Where HoursPerWeek = 5;

```
1 SELECT ModuleName
2 FROM module
3 WHERE HoursPerWeek = 5;
```

Result



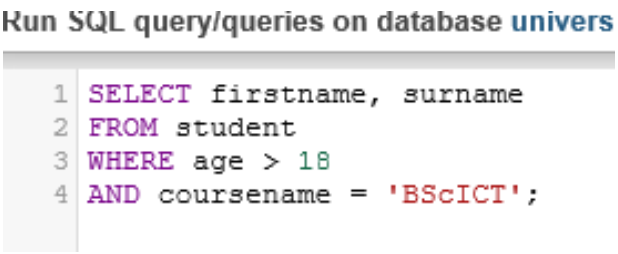
3. Get the full names of students above 18 who are on the BScICT course

SELECT firstname, surname

FROM student

WHERE age > 18

AND coursename = 'BScICT';



Result

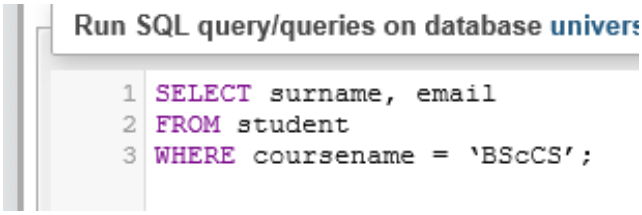
Exercise

A. Get the surnames and emails on the BScCS course

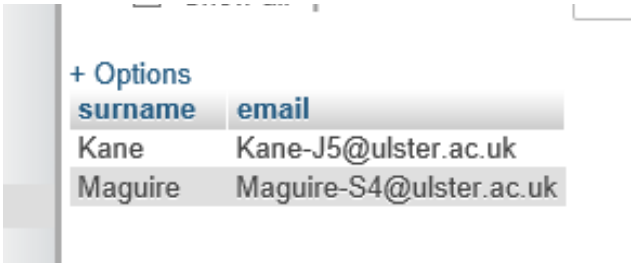
SELECT surname, email

FROM student

WHERE coursename = 'BScCS';



Result

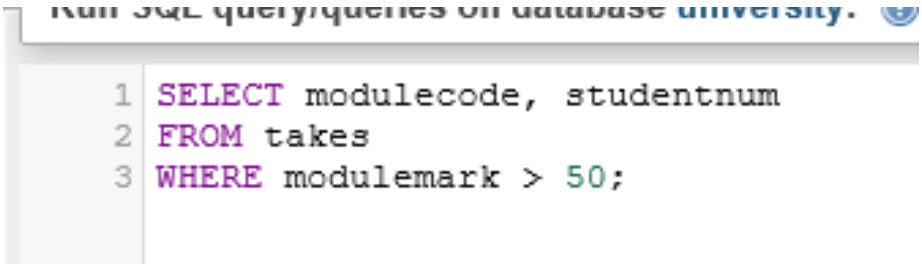


B. Get the module codes of students who got more than 50 in the module mark

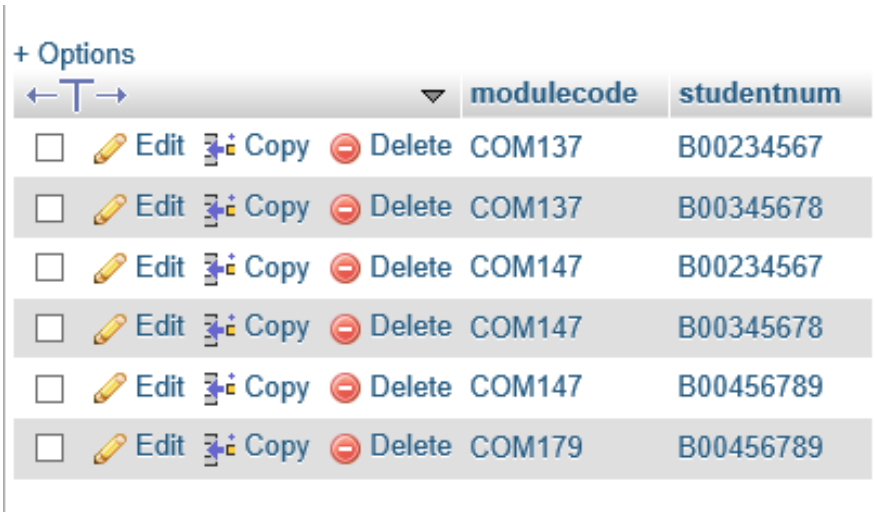
SELECT modulecode, studentnum

FROM takes

WHERE modulemark > 50;



Result



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';
```

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

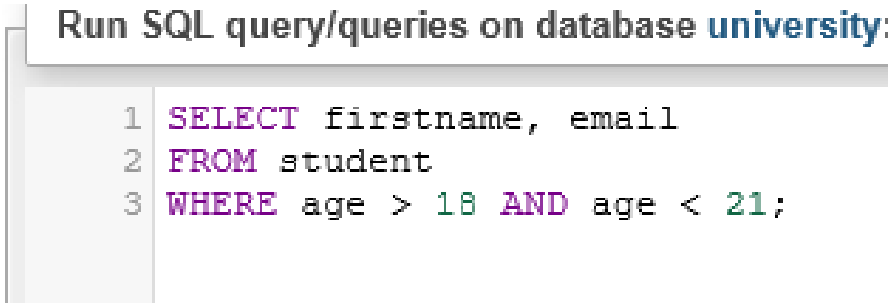
Result

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;

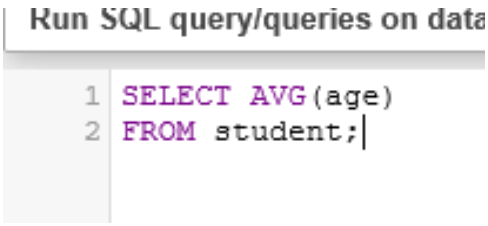


Result

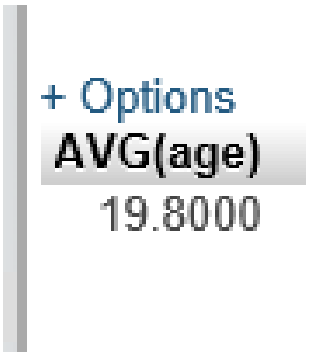
4. Get the Average age of all students

SELECT AVG(age)

FROM student;



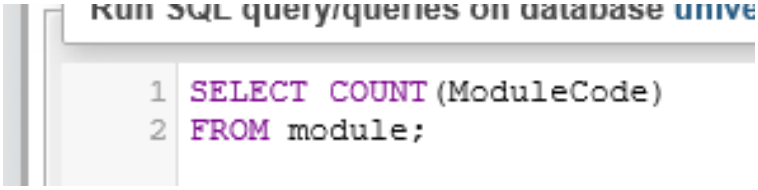
Result



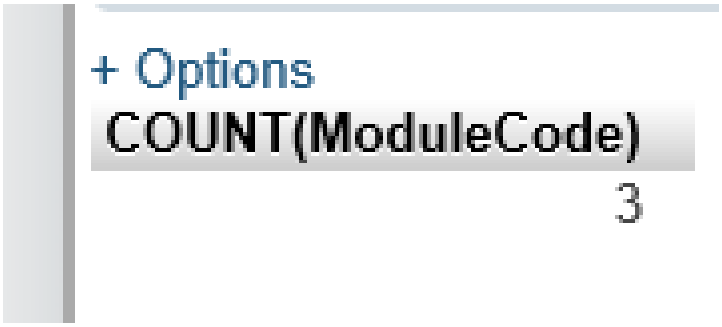
5. How Many modules are there?

SELECT COUNT(ModuleCode)

FROM module;



RESULT



6. How Many Students are on module COM147?

SELECT COUNT(studentnum)

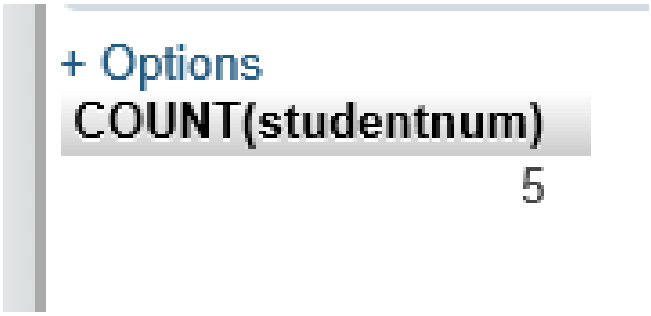
FROM takes

WHERE ModuleCode = ‘COM147’;

Run SQL query/queries on database university:

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

Result



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

+ 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

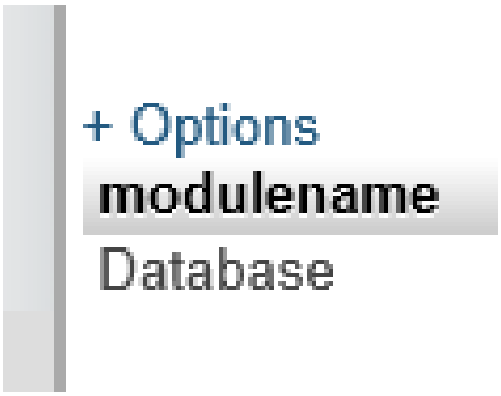
WHERE module.modulecode = takes.modulecode

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



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