Querying the University of West Auckland Database with Views

In the previous tutorial you wrote SQL code to perform the following queries:

1) Find how many grades have a cut-off of 70% or greater
2) Find how many students were enrolled in the course INFO101 in semester 1 2012.
3) Retrieve a list of all courses offered in semester 2 2012
4) Find the course weightings of each assessment for FINC201 in semester 2 2012
5) Retrieve the student ID number, given name and family name for every student enrolled in courses offered by the INFO department in semester 1 2012.
6) Find the student ID numbers, name, course name and final grade for everyone enrolled in semester 1 2012. The student name should be presented as one field called "StudentName", and the course code should be presented as a field called "CourseName".

The SQL code for each of these is listed below. Each of these queries has "magic numbers" in them, literal values that are embedded in the code. Your task for this tutorial is to implement each of these queries as a view.

--Question 1

SELECT COUNT (*) FROM GRADE_LOOKUP

WHERE MinMark >= 70;

--Question 2

SELECT COUNT(*) FROM ENROLMENT

WHERE CourseCode = 'INFO101'

AND SemesterID IN

(SELECT SemesterID

 FROM SEMESTER

 WHERE Year = 2012

 AND SemesterNum = 1

)

--Question 3

SELECT CourseCode

FROM SEMESTER_COURSE

WHERE SemesterID =

(SELECT SemesterID

 FROM SEMESTER

 WHERE Year=2012 AND

 SemesterNum = 2);

--Question 4

SELECT CourseMarks

FROM ASSESSMENT

WHERE CourseCode = 'FINC201' AND

SemesterID =

(SELECT SemesterID

 FROM SEMESTER

 WHERE Year=2012 AND

 SemesterNum=2

);

--Question 5

SELECT IDNum, GivenName, FamilyName

FROM STUDENT

WHERE IDNum IN

(SELECT IDNum

 FROM ENROLMENT

 WHERE SemesterID IN

```
(SELECT SemesterID

 FROM SEMESTER

 WHERE Year=2012

 AND SemesterNum=1

)

AND

CourseCode IN

(SELECT CourseCode

 FROM COURSE

 WHERE Department='INFO')

);
```

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--Question 6
SELECT IDNum, (GivenName + ' ' + FamilyName )

        AS StudentName, ENROLMENT.CourseCode, Name AS CourseName,FinalGrade

        FROM STUDENT,ENROLMENT,COURSE

        WHERE STUDENT.IDNum=ENROLMENT.StudentID

        AND COURSE.CourseCode = ENROLMENT.CourseCode

        AND SemesterID IN

        (

          SELECT SemesterID FROM SEMESTER

          WHERE Year=2012 AND SemesterNum=1

        );
```