

Quiz2 – Solutions

1. Based on *Student database*, you are expected to implement each query that carries out the operations given below.

Faculty(FacultyID, Name, DeanRegNo)

Department(DepartmentID, Name, HeadRegNo, FacultyNo)

Student(StudentNo, Name, Surname, Sex, DateofBirth, EduPeriod, DepartmentNo)

Instructor(InstructorRegNo, Name, Surname, Sex, Position, DepartmentNo)

Course(CourseID, CourseName, THour, PHour, Credit, DepartmentNo)

Section(CourseID, SectionID, Inst_inCharge)

Stu_Course(StudentNo, CourseID, SectionID, MO, Grade)

- a) Show the students' number, name, and surname whose department number is 1 and that have not taken any course offered by department 3.

```
select StudentNo, StudentName, StudentSurname from student where
student.department_DepartmentID=1 and StudentNo not in (select
student_course.student_StudentNo from student_course where
course.CourseID=student_course.course_CourseID and
course.department_DepartmentID=3)
```

- b) Find out id and name of the departments having at least one student and offering no course.

```
select DepartmentID, DepartmentName from department where (select count(*)
from student where student.department_DepartmentID
=department.DepartmentID)>0 and (select count(*) from course where
course.department_DepartmentID=department.DepartmentID)=0
```

- c) Find out the departments' id, name, and research assistant count having at least two research assistants (abbreviated as RA in database).

```
select DepartmentID, DepartmentName, count(*) as RA_Count from department,
instructor where department.DepartmentID=instructor.department_DepartmentID
and instructor.InstructorPosition="RA" group by department.DepartmentID having
count(*)>=2
```

- d) Find out the students' number, name, and surname whose total credit is greater than 10.

```
select StudentNo, StudentName, StudentSurname from student where StudentNo in
(select student_StudentNo From student_course, course where
student_course.course_CourseID=course.CourseID group by
student_course.student_StudentNo having sum(all course.CourseCredit)>10)
```