

COSC 5360-001
Spring 2014

Assignment 1

Due Date: Thursday, February 20, 2014

Submit a report in MS Word file. The cover page should contain your name, date, and the assignment number. The report should include SQL queries and corresponding outputs. You need to print the tables after you create them. You may copy the output and paste it in MS Word document.

Consider the University database as shown below. Draw an Entity Relationship (E-R) diagram, schema, create tables using Oracle database, and execute the following queries.

- 1) Get names, IDs and the number of credits of all math majors.
- 2) Get all information about CSC Faculty.
- 3) Get the courses number of all course in which students are enrolled.
- 4) Get all information about all students.
- 5) Get names and ids of all faculty members, arranged in alphabetical order by name. Call the resulting columns Faculty name and faculty number.
- 6) Get names of all math majors who have more than 30 credits.
- 7) Find IDs and names of all students taking ART103A.
- 8) Find stuId and grade of all students taking any course taught by faculty member whose facId is F110. Arrange in order by stuId.
- 9) Find course numbers and the names and majors of all students enrolled in the courses taught by Faculty member F110.
- 10) Get a list of all courses that meet in the same room with their schedules and room numbers.
- 11) Find all combinations of students and faculty where the students major is different from the faculty members department.
- 12) Find the number of all the courses taught by Byrne of the math department

Student				
stuld	lastName	firstName	major	credits
S1001	Smith	Tom	History	90
S1002	Chin	Ann	Math	36
S1005	Lee	Perry	History	3
S1010	Burns	Edward	Art	63
S1013	McCarthy	Owen	Math	0
S1015	Jones	Mary	Math	42
S1020	Rivera	Jane	CSC	15

FIGURE 1.1(a)

The Student Table

Faculty			
facId	name	department	rank
F101	Adams	Art	Professor
F105	Tanaka	CSC	Instructor
F110	Byrne	Math	Assistant
F115	Smith	History	Associate
F221	Smith	CSC	Professor

FIGURE 1.1(b)

The Faculty Table

Class			
classNumber	facId	schedule	room
ART103A	F101	MWF9	H221
CSC201A	F105	TuThF10	M110
CSC203A	F105	MThF12	M110
HST205A	F115	MWF11	H221
MTH101B	F110	MTuTh9	H225
MTH103C	F110	MWF11	H225

FIGURE 1.1(c)

The Class Table

FIGURE 1.1(d)

The Enroll Table

Enroll		
stuld	classNumber	grade
S1001	ART103A	A
S1001	HST205A	C
S1002	ART103A	D
S1002	CSC201A	F
S1002	MTH103C	B
S1010	ART103A	
S1010	MTH103C	
S1020	CSC201A	B
S1020	MTH101B	A