

ITM 331 SCHEDULE Query.sql

```
-- Create and use database
create database SCHEDULE;

use SCHEDULE;

--Create 5 Tables: Student, Instructor, Book, Course, Graduation

-- Create STUDENT table
create table Student_t
(NetID VARCHAR(6) not null,
StudentName VARCHAR(50) not null,
Major VARCHAR (20)
CONSTRAINT NETID_PK PRIMARY KEY (NETID));

-- Create INSTRUCTOR table
create table Instructor_t
(InstructorName varchar(50) not null,
InstructorOffice varchar(12),
CONSTRAINT Instructor_PK PRIMARY KEY(INSTRUCTORNAME));

-- Create BOOK table
create table Book_t
(Book VARCHAR(100) not null,
BookPublisher VARCHAR(100),
CONSTRAINT Book_PK PRIMARY KEY(Book));

-- Create COURSE table
create table Course_t
(Course# VARCHAR (20) not null,
CourseName VARCHAR (100) not null,
CreditHours INTEGER,
CourseClassroom VARCHAR (25),
InstructorName VARCHAR(50) not null,
Book VARCHAR(100),
CONSTRAINT Course_PK PRIMARY KEY (Course#),
CONSTRAINT Course_FK1 FOREIGN KEY (InstructorName) REFERENCES
Instructor_t(InstructorName),
CONSTRAINT Course_FK2 FOREIGN KEY (Book) REFERENCES Book_t(Book));

-- Create GRADUATION table
create table Graduation_t
(NetID VARCHAR (6) not null,
Course# VARCHAR (20) not null,
GraduationSem VARCHAR (12),
CONSTRAINT Graduation_PK PRIMARY KEY (NetID, Course#),
CONSTRAINT Graduation_FK1 FOREIGN KEY (NetID) REFERENCES Student_t(NetID),
CONSTRAINT Graduation_FK2 FOREIGN KEY (Course#) REFERENCES
Course_t(Course#));
```

-- Insert data into each of the tables

insert into Student_t values

--(NetID, StudentName, Major)
('se4258', 'Monica Gutierrez', 'BUS ADMIN ITM'),
('ne9697', 'Pablo Lopez', 'BUS ADMIN ITM'),
('ch2489', 'Edgar Martinez', 'BUS ADMIN ITM'),
('xi9428', 'Shawn Fernando', 'BUS ADMIN ITM'),
('fp6744', 'Michael Yu', 'BUS ADMIN ITM'),
('ab1234', 'SQL Dude', 'BUS ADMIN ITM');

insert into Instructor_t values

--(InstructorName, InstructorOffice)
--Monica
('Hongwei Du', 'VBT 450'),
('Jyotishka Ray', 'VBT 342'),
('Peng Xie', 'VBT 433'),
('Yung Jae Lee', 'VBT 336'),
('Filippo Rebessi', 'VBT 344'),
('Matthew Taylor', 'VBT 442'),
('Douglas Selee', 'VBT 443'),
('Ya You', 'VBT 454'),
-- Shawn
('Tee Lim', 'VBT 435'),
('Tim Wat', 'VBT 443'),
('Wesley Blundell', 'VBT 353'),
--Edgar
('Jesse Norman', 'VBT348'),
('Tammie Mosley', 'VBT 356'),
('Rick Choy', 'VBT 360'),
--Pablo
('Bijan Mashaw', 'Contra 112'),
('Sarah Cardenas', 'MJohn 315'),
('Tim Silvia', 'Art 207'),
('Steve Andrews', 'Contra 112'),
--Michael
('Surendra Sarnikar', 'VBT 350'),
('Cesar Maloles', 'VBT 327'),
('Travis Cox', 'VBT 443'),
--SQL Dude
('SQL Teacher', 'SQL Rm');

insert into Book_t values

--(BookName, Publisher)
--Monica
('Python for Everybody', 'CreateSpace Independent Publishing'),
('Systems Analysis & Design', 'Wiley'),
('An Introduction to Management Science', 'Cengage Learning'),
('International Economics', 'McGraw-Hill Higher Education'),
('Managerial Economics: Theory, Application, and Cases', 'W.W. Norton &

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Company'),
('Marketing: The Core', 'McGraw-Hill Higher Education'),
('Business Ethics: How to Design and Manage Ethical Organizations',
'Wiley'),
('Modern Database Management ', 'Pearson'),
--Shawn
('Fundamentals of Corporate Finance', 'McGraw-Hill Higher Education'),
('Business, Government, and Society: A Managerial Perspective', 'McGraw-
Hill Higher Education'),
('Microeconomics', 'Pearson'),
--Pablo
('Ethical Behavior in the Workplace', 'McGraw-Hill Higher Education'),
('Business Calculus II', 'Wiley'),
('Organizational Behavior', 'Pearson Publishing'),
--Edgar
('Management Information Systems', 'Cengage Learning'),
('Fundamental of Corporate Finance', 'McGraw-Hill Higher Education'),
('Essentials of Business Analytics', 'Cengage Learning'),
--Michael
('E-Commerce 2017', 'Pearson'),
('Marketing', 'McGraw-Hill Education'),
('Project Management: the Managerial Process', 'McGraw-Hill Education'),
--SQL Dude
('SQL is AWESOME', 'SQL Publishing');

insert into Course_t values
--(Course#, CourseName, CreditHours, CourseClassroom, InstructorName, Book)
--Monica
('2139 ITM 330', 'Business Application Programming', 3, 'VBT 221', 'Hongwei
Du', 'Python for Everybody'),
('2080 ITM 331', 'Database Management Systems', 3, 'VBT 221', 'Jyotishka
Ray', 'Modern Database Management'),
('2146 ITM 336', 'Information Systems Development and Management', 3, 'VBT
222', 'Peng Xie', 'Systems Analysis & Design'),
('2275 MGMT 350', 'Decision Science', 3, 'AE 183', 'Yung Jae Lee', 'An
Introduction to Management Science'),
('1868 ECON 3107', 'International Economics', 3, 'N221', 'Filippo Rebessi',
'International Economics'),
('3514 ECON 3551', 'Managerial Economics and Business Strategy', 3, 'N116',
'Matthew Taylor', 'Managerial Economics: Theory, Application, and Cases'),
('1006 MGMT 3560', 'Business and Professional Ethics', 3, 'L231', 'Douglas
Selee', 'Business Ethics: How to Design and Manage Ethical Organizations'),
('1328 MKTG 3401', 'Marketing Principles', 3, 'VBT 137', 'Ya You',
'Marketing: The Core'),
-- Edgar
('1922 BUS 340', 'IT Management', 3, 'AE 0183', 'Jesse Norman', 'Management
Information Systems'),
('2401 BUS 330', 'Financial Management', 3, 'N221', 'Tammie Mosley',
'Fundamentals of Corporate Finance'),
('2174 MGMT 350', 'Decision Science', 3, 'AE 0183', 'Rick Choy',
'Essentials of Business Analytics'),

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--Shawn
('2404 BUS 330', 'Financial Management', 3, 'AE 0285', 'Tee Lim',
'Fundamentals of Corporate Finance'),
('2294 BUS 370', 'Business, Government, & Society', 3, 'S213', 'Tim Wat',
'Business, Government, and Society: A Managerial Perspective'),
('2553 ECON 380', 'Managerial Economics and Business Strategy', 3, 'RH
0137', 'Wesley Blundell', 'Microeconomics'),
--Michael
('2081 ITM 338', 'E-Business Tech & Management', 3, 'VBT 222', 'Surendra
Sarnikar', 'E-Commerce 2017'),
('2522 BUS 325', 'Marketing Principles', 3, 'MI 2106', 'Cesar Maloles',
'Marketing'),
('1561 MGMT 450', 'Project Management', 3, 'VBT 216 ', 'Travis Cox',
'Project Management: the Managerial Process'),
--Pablo
('2402 BUS 330', 'Financial Management', 3, 'N221', 'Tammie Mosley',
'Fundamentals of Corporate Finance'),
('2523 BUS 325', 'Marketing Principles', 3, 'MI 2106', 'Cesar Maloles',
'Marketing'),
('1007 MGMT 3560', 'Business and Professional Ethics', 3, 'L231', 'Douglas
Selee', 'Business Ethics: How to Design and Manage Ethical Organizations'),
('1564 MGMT 450', 'Project Management', 3, 'VBT 216 ', 'Travis Cox',
'Project Management: the Managerial Process'),
--SQL Dude
('1234 ITM 001', 'SQL is my Life', 3, 'SQL 123', 'SQL Teacher', 'SQL is
Awesome');
```

```
insert into Graduation_t values
```

```
--(NetID, Course#, GraduationSem)
```

```
--Monica
```

```
('se4258', '2139 ITM 330', 'Fall 2019'),
('se4258', '2080 ITM 331', 'Fall 2019'),
('se4258', '2146 ITM 336', 'Fall 2019'),
('se4258', '2275 MGMT 350', 'Fall 2019'),
('se4258', '1868 ECON 3107', 'Fall 2019'),
('se4258', '3514 ECON 3551', 'Fall 2019'),
('se4258', '1006 MGMT 3560', 'Fall 2019'),
('se4258', '1328 MKTG 3401', 'Fall 2019'),
```

```
--Pablo
```

```
('ne9697', '2080 ITM 331', 'Spring 2020'),
('ne9697', '2402 BUS 330', 'Spring 2020'),
('ne9697', '2523 BUS 325', 'Spring 2020'),
('ne9697', '1007 MGMT 3560', 'Spring 2020'),
('ne9697', '1564 MGMT 450', 'Spring 2020'),
```

```
--Shawn
```

```
('xi9428', '2404 BUS 330', 'Fall 2019'),
('xi9428', '2080 ITM 331', 'Fall 2019'),
('xi9428', '2294 BUS 370', 'Fall 2019'),
('xi9428', '2553 ECON 380', 'Fall 2019'),
```

```
--Edgar
```

```
('ch2489', '2080 ITM 331', 'Spring 2020'),
('ch2489', '2401 BUS 330', 'Spring 2020'),
('ch2489', '1922 BUS 340', 'Spring 2020'),
('ch2489', '2174 MGMT 350', 'Spring 2020'),
--Michael
('fp6744', '2080 ITM 331', 'Fall 2019'),
('fp6744', '2081 ITM 338', 'Fall 2019'),
('fp6744', '2522 BUS 325', 'Fall 2019'),
('fp6744', '1561 MGMT 450', 'Fall 2019'),
--SQL Dude
('ab1234', '1234 ITM 001', 'Spring 2025');
```

--QUERY 1 Count the number of students who are graduating in the same semester.

--Your query should display the GraduationSemester and total number of students

--graduating in each semester as 'Students Graduating'

```
SELECT COUNT(Distinct NetID) AS 'Students Graduating', GraduationSem
FROM Graduation_t
GROUP BY Graduation_t.GraduationSem;
```

--QUERY 2 Find the total number of courses taken by each student in 2018.

--Your query should display the NetID and total number of courses taken by each student as 'Total Courses'

```
SELECT NetID, COUNT (COURSE#) AS 'Total Courses'
FROM Graduation_t
GROUP BY NetID;
```

--QUERY 3 Display the name of all the instructors who have taught each student in the database.

--Your query should display the NetID, StudentName, Course#, and InstructorName. Output should be sorted in ascending order by NetID

```
SELECT Student_t.NetID, Student_t.StudentName, Course_t.Course#,
Course_t.InstructorName
FROM Course_t, Graduation_t, Student_t
WHERE Graduation_t.Course# = Course_t.Course#
AND Student_t.NetID = Graduation_t.NetID
ORDER BY Graduation_t.NetID ASC;
```

--QUERY 4 Display the NetID and the total credit hours taken by each student in 2018

```
SELECT Graduation_t.NetID, SUM(CreditHours) AS 'Total Credit Hours'
FROM Graduation_t, Course_t, Student_t
WHERE Student_t.NetID = Graduation_t.NetId
AND Graduation_t.Course# = Course_t.Course#
GROUP BY Graduation_t.NetID;
```

--QUERY 5 Display the NetID, StudentName, Major and GraduationSemester of the

```
--students who have taken Course# ITM 331 **SQL Dude did not take the  
course and should not display  
SELECT Student_t.NetID, Student_t.StudentName, Graduation_t.GraduationSem  
FROM Student_t  
INNER JOIN Graduation_t  
ON Graduation_t.NetID = Student_t.NetID  
WHERE Course# = '2080 ITM 331'  
ORDER BY Student_t.NetID ASC;
```