Lecture 05– Homework Using database db03

This is a continuation of todays classwork. Include the classwork problems in this submission

Use the database file db03

Name the file ‘05Homework.txt’

For this project you will perform the indicated actions using insert, update, or delete

After each numbered operation is complete, you will execute a query ( provided) to check you work.

Do not use a surrogate key in any command, unless the instructions say you can.

Note change from db02. There is an employeeNumber which is unique.

**IMPORTANT:**

At the beginning of your input file – put the following commands ( before any others)

ALTER SEQUENCE employee\_id\_seq RESTART WITH 20;

ALTER SEQUENCE meeting\_id\_seq RESTART WITH 120;

BEGIN;

After the last query. Put the following command

ROLLBACK;

Doing this will allow you to run your file multiple times without negatively affecting the database.

**1 – Add a new employee**

Name = ‘Farquar’ WorkPhone = 9876 HomePhone 3333  
 EmployeeID 'X411123'

*Do not set the id yourself. Let the system do that for you.*

*This should consist of two insert commands. You may use the returned ID from the first command in the second command.*

**Query:**

SELECT employeenumber, employee.name , phoneType.name, PhoneInfo.Number

FROM Employee

JOIN PhoneInfo ON ( employee.id = phoneInfo.employeeid)

JOIN PhoneType ON ( phoneType.id = phoneInfo.type)

WHERE employee.name ILIKE 'F%';

**2 – Add two new employees in a single statement**

Name = ‘Amy’ EmployeeNumber = ‘X412345'

Name = ‘Bert’ EmployeeNumber = 'X412346'

**Query:**

SELECT employeenumber, employee.name

FROM Employee

WHERE Employeenumber like 'X4%'

ORDER BY employeenumber;

**3 – Add phone numbers for Amy**

Pager ( P) ‘345-3456’

Business (B) ‘123-4567

*Do NOT use employee.ID in any of your commands.*

**Query:**

SELECT employeenumber, employee.name , phoneType.name as PhoneType, PhoneInfo.Number

FROM Employee

JOIN PhoneInfo ON ( Employee.id = phoneInfo.employeeid)

JOIN PhoneType ON ( phoneType.id = phoneInfo.type)

WHERE employee.employeenumber LIKE 'X4%'

ORDER BY employeenumber, phoneType;

**4-Change Amy’s name ( EmployeeNumber X412345) to ‘Ardvark’**

**Query:**

SELECT employeenumber, employee.name

FROM Employee

WHERE Employeenumber like 'X4%'

order by employeenumber;

**5 – Delete the employee with employeNumber = ‘X412346';**

**Query:**

SELECT employeenumber, name

FROM Employee

WHERE EmployeeNumber LIKE 'X4%'

ORDER BY NAME;

**6 – Delete Employee ‘X412345’ from the database**

*This will take two commands. One to delete the phoneInfo, one to delete the employee record*

**Query:**

SELECT employeenumber, name

FROM Employee

WHERE EmployeeNumber LIKE 'X4%'

ORDER BY NAME;

**7 – Add two new employees**

Name = ‘New1’ EmployeeID = ‘X434567'

Name = ‘New2 EmployeeID = 'X434568'

*Add both in a single command;*

**Query:**

SELECT employeenumber, name

FROM Employee

WHERE name ilike 'New%'

ORDER BY EmployeeNumber;

**8 – Give New1 and New2 a phone number**

Business (B) 123-4567 for both employees.

*Do this in a single command*

**Query:**

SELECT employeenumber, employee.name , phoneType.name, PhoneInfo.Number

FROM Employee

JOIN PhoneInfo ON ( Employee.id = phoneInfo.employeeid)

JOIN PhoneType ON ( phoneType.id = phoneInfo.type)

WHERE employee.employeeNumber like 'X4%'

ORDER BY employee.employeeNumber;

**9 – Create a new meeting**

Purpose = ‘New Employee Orientation’

RoomNumber 104

Building ‘A’

StartTime ‘2019-04-05 at 3:00 PM’

Duration one hour

Created by ‘Sarah’ ( ‘X311234’)

Moderated by ‘Ariel ( ‘X311239’)

*Do this in a single command*

**Query:**

SELECT room.roomNumber, building, startTime, duration, purpose, employee.name as creator

FROM Meeting

JOIN room ON ( room.id = meeting.roomid)

JOIN employee ON ( employee.id = meeting.creatorid)

ORDER BY starttime ;

**10 – Add Employees to the new meeting you just created**

EmployeeIDs 'X476543', 'X498765', 'X498989'

*There is only one Meeting that has a purpose of ‘New %’ Use that to find the correct meeting.*

*Do this in one command.*

**Query:**

SELECT name, employeenumber

FROM Employee

JOIN Attendees ON Employee.id = Attendees.employeeid

JOIN Meeting ON Meeting.id = Attendees.meetingid

WHERE Meeting.purpose like 'New%'

ORDER BY NAME;

**11 – Move the time of all staff meetings 30 minutes into the future**

**Query:**

SELECT \*

FROM Meeting

WHERE purpose = 'Staff'

ORDER BY starttime, roomid;

**12 – Remove Farquar from all meetings**

**Query:**

SELECT name, employeenumber

FROM Employee

JOIN Attendees ON Employee.id = Attendees.employeeid

JOIN Meeting ON Meeting.id = Attendees.meetingid

WHERE Meeting.purpose like 'New%'

ORDER BY NAME;

**13 – Change the moderator for the ‘New Employee %’ meeting to Albert ( ‘X311248’)**

**Query:**

SELECT purpose, Employee.name as Moderator

FROM Meeting

JOIN Employee ON employee.id = meeting.moderatorid

WHERE meeting.purpose like 'New%';

**14 – For every meeting that Albert ( ‘X311248’) is moderator, change to Max ( ‘X311237’)**

**Query:**

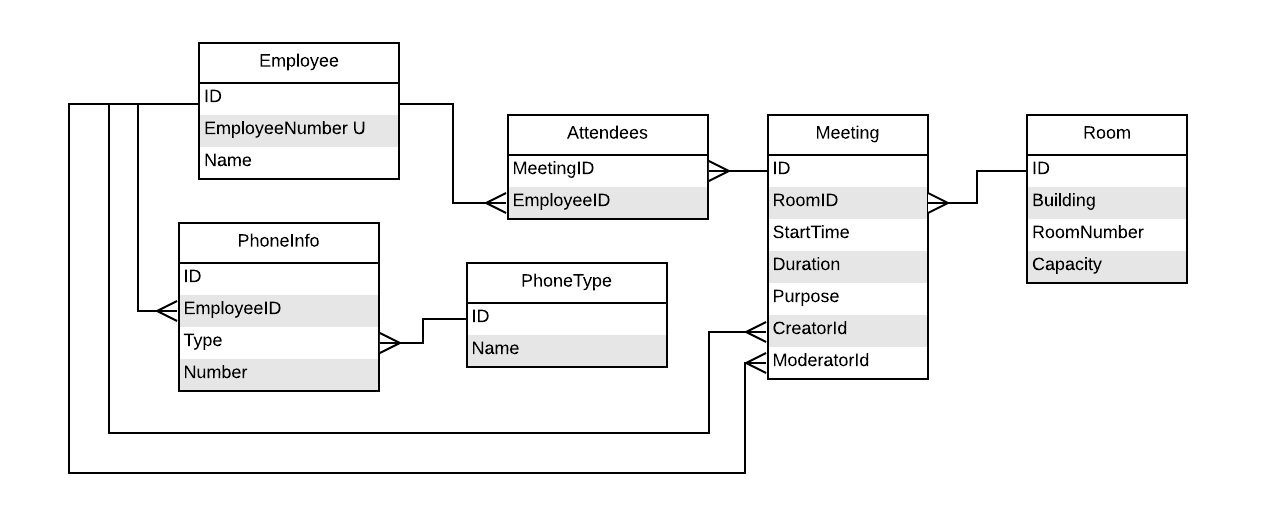
SELECT meeting.purpose, employee.name, employee.employeenumber

FROM meeting

JOIN employee ON meeting.moderatorid = employee.id

WHERE employee.employeenumber IN ( 'X311248', 'X311237')

ORDER BY meeting.starttime;



**Expected Output:**

ALTER SEQUENCE

ALTER SEQUENCE

BEGIN

#1 Add a new employee. Name = Farquar WorkPhone = 9876

HomePhone = 3333 EmployeeNumberX476543

Do not set the ID - let the system do that for you

id

----

20

(1 row)

INSERT 0 1

INSERT 0 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

employeenumber | name | name | number

----------------+---------+------+----------

X476543 | Farquar | Work | 123-9876

X476543 | Farquar | Home | 456-3333

(2 rows)

#2 Add two new employees in a single statement.

Name = Amy EmployeeNumber X412345

Name = Bert EmployeeNumber X412346

INSERT 0 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

employeenumber | name

----------------+---------

X412345 | Amy

X412346 | Bert

X476543 | Farquar

(3 rows)

#3 Add phone numbers for Amy. Do NOT use Employee.ID in your command

Amy Pager ( P) 345-3456 Business ( B) 123-4567

INSERT 0 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

employeenumber | name | phonetype | number

----------------+---------+-----------+----------

X412345 | Amy | Business | 123-4567

X412345 | Amy | Pager | 345-3456

X476543 | Farquar | Home | 456-3333

X476543 | Farquar | Work | 123-9876

(4 rows)

#4 Change Amys name to Ardvark Again do not use the surrogate key.

Do not assume there is only one Amy in the DB

UPDATE 1

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employeenumber | name

----------------+---------

X412345 | Ardvark

X412346 | Bert

X476543 | Farquar

(3 rows)

#5 Delete the employee with employee number = X412346;

DELETE 1

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employeenumber | name

----------------+---------

X412345 | Ardvark

X476543 | Farquar

(2 rows)

#6 Delete employee X412345 from the database. This will take two commands.

Do not use a surrogate key.

DELETE 2

DELETE 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

employeenumber | name

----------------+---------

X476543 | Farquar

(1 row)

#7 Add two new employees "New1" and "New2"

with employeeNumber "X434567" and " X434568" respectively

INSERT 0 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

employeenumber | name

----------------+------

X498765 | New1

X498989 | New2

(2 rows)

#8 Using the name field. give New1 and New2

A business number ( 123-4567) Same number to both employees

Do this in a single command

INSERT 0 2

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employeenumber | name | name | number

----------------+---------+----------+----------

X476543 | Farquar | Work | 123-9876

X476543 | Farquar | Home | 456-3333

X498765 | New1 | Business | 123-4567

X498989 | New2 | Business | 123-4567

(4 rows)

#9 Create a meeting ( New Employee Orientation ) with room A-104

on 2019-04-05 at 3:00 PM for One hour.

Created by Sarah ( X311234) Moderated by Ariel (X311239)

INSERT 0 1

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roomnumber | building | starttime | duration | purpose | creator

------------+----------+---------------------+----------+--------------------------+---------

101 | A | 2018-03-04 09:30:00 | 01:00:00 | Staff | Alice

103 | A | 2018-03-04 09:30:00 | 01:00:00 | Staff | Winston

102 | A | 2018-03-07 09:30:00 | 01:00:00 | Team Build | Alice

202 | B | 2018-03-07 11:30:00 | 01:30:00 | HR Presentation | Jack

201 | B | 2018-03-09 09:30:00 | 01:00:00 | DB Issues | Ariel

101 | A | 2018-03-11 09:30:00 | 01:00:00 | Staff | Alice

201 | B | 2018-03-15 09:30:00 | 01:00:00 | Post Mortem | Dan

104 | A | 2018-03-17 11:00:00 | 01:30:00 | Sales | Winston

103 | A | 2018-03-18 09:30:00 | 01:00:00 | Staff | Winston

101 | A | 2018-03-18 09:30:00 | 01:00:00 | Staff | Alice

101 | B | 2018-03-21 12:00:00 | 01:00:00 | Lunch | Alice

101 | A | 2018-03-25 09:30:00 | 01:00:00 | Staff | Alice

101 | B | 2018-03-28 12:00:00 | 01:00:00 | Lunch | Alice

101 | B | 2018-03-28 12:00:00 | 01:00:00 | PlanningLunch | Winston

101 | B | 2018-04-05 12:00:00 | 01:00:00 | Lunch | Alice

104 | A | 2018-04-17 11:00:00 | 01:30:00 | Sales | Winston

104 | A | 2018-05-15 09:30:00 | 01:00:00 | Post Mortem | Dan

104 | A | 2018-05-17 11:00:00 | 01:30:00 | Sales | Winston

104 | A | 2019-04-05 15:00:00 | 01:00:00 | New Employee Orientation | Sarah

(19 rows)

#10 Add X476543, X498765, X498989 - to the "New Employee" meeting.

Do not use the PK of the meeting ( use the name)

INSERT 0 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

name | employeenumber

---------+----------------

Farquar | X476543

New1 | X498765

New2 | X498989

(3 rows)

#11 Move the time of all staff meetings 30 minutes into the future

with a single command

UPDATE 6

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id | roomid | starttime | duration | purpose | creatorid | moderatorid

-----+--------+---------------------+----------+---------+-----------+-------------

101 | 201 | 2018-03-04 10:00:00 | 01:00:00 | Staff | 14 | 14

105 | 203 | 2018-03-04 10:00:00 | 01:00:00 | Staff | 3 | 4

102 | 201 | 2018-03-11 10:00:00 | 01:00:00 | Staff | 14 | 14

103 | 201 | 2018-03-18 10:00:00 | 01:00:00 | Staff | 14 | 14

106 | 203 | 2018-03-18 10:00:00 | 01:00:00 | Staff | 3 | 4

104 | 201 | 2018-03-25 10:00:00 | 01:00:00 | Staff | 14 | 14

(6 rows)

#12 Delete Forquar from all meetings.

DELETE 1

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name | employeenumber

------+----------------

New1 | X498765

New2 | X498989

(2 rows)

#13 Change the moderator for the New Employee meeting to Albert ( X311248)

UPDATE 1

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purpose | moderator

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New Employee Orientation | Albert

(1 row)

#14 Wherever X311248 ( Albert) is moderator of a meeting,

Change to X311237 ( max)

UPDATE 4

purpose | name | employeenumber

--------------------------+------+----------------

Staff | Max | X311237

Team Build | Max | X311237

Post Mortem | Max | X311237

Sales | Max | X311237

Staff | Max | X311237

PlanningLunch | Max | X311237

Sales | Max | X311237

Post Mortem | Max | X311237

Sales | Max | X311237

New Employee Orientation | Max | X311237

(10 rows)

ROLLBACK