

Assignment 5
Katrin Jogi

#Part1.

#query with three-way join.

#query finds the names of the buyers who have bought 20 items from "Category98"

```
Select bname
  From Buyer B, Buy Y, Item I
  Where B.bid=Y.bid
    and Y.iid=I.IID
    and I.quantity = 20
    and I.category = "Category98"
;
```

OUTPUT:

bname
FirstLastBuyer21345
FirstLastBuyer12961
FirstLastBuyer12125
FirstLastBuyer2278
FirstLastBuyer21135
FirstLastBuyer5895
FirstLastBuyer12987
FirstLastBuyer4044
FirstLastBuyer21306
FirstLastBuyer22363
FirstLastBuyer6929
FirstLastBuyer3138
FirstLastBuyer21975

#aggregate query using group by clause

#query returns the name, department ID and average salary grouped by department

```
Select dname, D.dID, avg(salary)
  From Employee E, WorksIn W, Department D
  Where E.eid=W.eid
    and W.diD=D.diD
  group by D.dID
  order by D.dID
;
```

OUTPUT:

dname	dID	avg(salary)
DepartmentName1	1	90687.6000
DepartmentName2	2	83642.6000
DepartmentName3	3	119247.5000
DepartmentName4	4	82117.6667
DepartmentName5	5	102479.1667

DepartmentName6	6	72540.0000
DepartmentName7	7	74794.6667
DepartmentName8	8	67924.2500

#aggregate query using a group by clause and a having clause
#query finds the sellers who have posted more than 9 items and returns their
#name, quantity posted, average price, minimum price and maximum price of the items
Select sname, count(*), avg(price), max(price), min(price)
from Seller S, Post P, Item I
where S.sid=P.sid
and P.IID=I.IID
group by s.sname
having count(*) > 9
;

OUTPUT:

sname	count(*)	avg(price)	max(price)	min(price)
FirstLastSeller886	10	264.0000	481	1
FirstLastSeller4036	10	267.2000	500	44

#Part2.

select count(*) from Employee ;

OUTPUT:

count(*)
350

#insert new employee 651

insert into Employee values (651,"FirstLastEmployee351","1982-10-08",0,81924) ;

#insert complete

select count(*) from Employee ;

OUTPUT:

count(*)
351

select * from Employee

where eid = 651

;

OUTPUT:

eID	ename	DOB	dependents	salary
651	FirstLastEmployee351	1982-10-08	0	81924

#update info for employee 651

update employee

set dob = "1982-10-18"

where eid = 651

;

#update complete

select * from Employee

where eid = 651

;

OUTPUT:

eID	ename	DOB	dependents	salary
651	FirstLastEmployee351	1982-10-18	0	81924

#update several tuples in Item with reference to Post

select * from Item I, Post P

where I.IID = P.IID

and P.sid = 200000886

;

OUTPUT:

IID	itemName	price	category	quantity	IID	sID	pdate
400000167	ItemName167	166	Category14	5	400000167	200000886	2001-06-10
400007200	ItemName7200	387	Category55	15	400007200	200000886	2017-12-20
400008804	ItemName8804	422	Category34	8	400008804	200000886	2012-01-06
400013480	ItemName13480	242	Category26	20	400013480	200000886	1995-11-18
400016339	ItemName16339	389	Category74	9	400016339	200000886	2014-08-04
400028137	ItemName28137	481	Category22	1	400028137	200000886	2019-10-29
400031258	ItemName31258	21	Category71	7	400031258	200000886	2023-05-30
400038487	ItemName38487	336	Category24	16	400038487	200000886	2003-11-03

400040073	ItemName40073	1	Category28	12	400040073	200000886	2007-09-25
400048040	ItemName48040	195	Category73	8	400048040	200000886	2022-11-26

```

+
update Item I, Post P
  set I.price = price - 1
  where I.IID = P.IID
  and P.sid = 200000886
;

```

```

#update complete
select * from Item I, Post P
  where I.IID = P.IID
  and P.sid = 200000886
;

```

OUTPUT:

IID	itemName	price	category	quantity	IID	sID	pdate
400000167	ItemName167	165	Category14	5	400000167	200000886	2001-06-10
400007200	ItemName7200	386	Category55	15	400007200	200000886	2017-12-20
400008804	ItemName8804	421	Category34	8	400008804	200000886	2012-01-06
400013480	ItemName13480	241	Category26	20	400013480	200000886	1995-11-18
400016339	ItemName16339	388	Category74	9	400016339	200000886	2014-08-04
400028137	ItemName28137	480	Category22	1	400028137	200000886	2019-10-29
400031258	ItemName31258	20	Category71	7	400031258	200000886	2023-05-30
400038487	ItemName38487	335	Category24	16	400038487	200000886	2003-11-03
400040073	ItemName40073	0	Category28	12	400040073	200000886	2007-09-25
400048040	ItemName48040	194	Category73	8	400048040	200000886	2022-11-26