

Sami Al-Qusus Assignment 2 (CSCI370) Feb16, 2018

Note: equivalent relational algebra and Datalog query was submitted by hand.

Part 1.

1. select * from Events;

2.SQL> select name,address from Clients C join IndividualClients I on
C.cid = I.cid
where occupation in ('Doctor','Lawyer');

3.select eventType, eventDate, name
from Clients C, Attendance A, Events E where C.cid=A.cid and
A.eid=E.eid;

4.select eventType, description, eventDate, location from Events
where eventDate >= Date '2017-06-01' and eventDate <= Date
'2017-06-15';

5.select eventDate, location, name, occupation from Clients C,
IndividualClients I, Attendance A, Events E
where C.cid=I.cid and A.eid=E.eid and C.cid=A.cid and eventType =
'Golf Tournament';

6.select distinct name from Clients C, Donations D where C.cid=D.cid
group by name having count(name)>=1;

7.select distinct name from Clients C, Donations D where C.cid=D.cid
and amount>100;

8.select name from Clients where name not in (select name from Clients
C, Events E, Attendance A where C.cid=A.cid and A.eid=E.eid);

9.select name from Clients C, CompanyClients CC
where (name not in (select name from Clients C, Events E, Attendance A
where C.cid=A.cid and A.eid=E.eid and eventType='Dinner'))
and C.cid = CC.cid;

10.select distinct name from Clients C, Attendance A, Events E
where C.cid=A.cid and A.eid=E.eid and numberOfPeople>4
and(name not in (select distinct name from Clients C, Attendance A,
Events E where C.cid=A.cid and A.eid=E.eid and numberOfPeople<=4));

Part 2.

1.select eventType, description, eventDate from Events where
capacity=(select max(capacity) from Events);

2.select eventType, eventDate, count(cid) as totalClients from
Attendance A, Events E
where A.eid=E.eid group by eventType, eventDate order by totalClients
desc;

3.select name, sum(amount) as totalDonation from Clients C, Donations D
where C.cid=D.cid group by name;

4.select name,count(eid) as totalEventsAttended from Clients C left
join Attendance A on C.cid=A.cid group by name order by name asc;

5.select distinct eventType, description, eventDate, location from
Events E, Attendance A,
(select eid from(select eid, sum(numberOfPeople) as totalAttendance
from Attendance group by eid)
where totalAttendance=(select max(totalAttendance)
from (select eid, sum(numberOfPeople) as totalAttendance from
Attendance group by eid))) maxed where A.eid=E.eid and maxed.eid =
A.eid;

6.select name from Clients C, Donations D where C.cid=D.cid group by
name having count(name)>5;

7.select name from (select name from Clients C, Donations D where
C.cid=D.cid and amount>100) group by name having count(name)>=5;

8.select name from Clients C, Donations D where C.cid=D.cid group by
name having sum(amount)>100000;