

```
create database assessment
```

```
use assessment
```

```
CREATE SCHEMA cd AUTHORIZATION dbo
```

```
create table assessment.cd.members(memid int,surname varchar(200),firstname  
varchar(200),address varchar(300), zipcode int, joindate timestamp )  
drop table cd.members
```

```
create table assessment.cd.bookings(memid int,facid int, no_of_slots_booked int,starttime  
timestamp)
```

```
create table assessment.cd.facilities(facid int,name varchar(200), membercost  
numeric,guestcost numeric,initialcost numeric, monthlymaintenance numeric)
```

```
select * from cd.members
```

```
delete cd.members
```

```
--Members
```

```
insert into cd.members(memid,surname,firstname,address,zipcode) values  
(1,'Verma','Dev','Raipur',490001),(2,'Sharma','Deva','Bhilai',490006)
```

```
insert into cd.members(memid,surname,firstname,address,zipcode) values  
(3,'Rathore','Abhay','Raipur',490009),(4,'D','Rupesh','Bhilai',490006)
```

```
--Bookings
```

```
insert into cd.bookings(memid,facid,no_of_slots_booked) values(1,100,5)
```

```
insert into cd.bookings(memid,facid,no_of_slots_booked) values(2,200,9),(3,300,2),(4,400,12)
```

```
--Assessment
```

```
insert into cd.facilities values(100,'Dev',1500,1000,500,100)
```

```
insert into cd.facilities
```

```
values(100,'Abhay',1700,1100,600,100),(100,'Ketan',1600,1200,700,100),(100,'Deva',2000,130  
0,800,100)
```

```
UPDATE cd.facilities
```

```
SET name = 'Facility1' WHERE cd.facilities.name in ('Dev','Deva','Abhay','Ketan');
```

```
--Q1
```

```
select cd.members.memid, cd.members.firstname, cd.bookings.starttime,  
cd.bookings.no_of_slots_booked from cd.bookings full join cd.members on cd.bookings.memid  
= cd.members.memid where cd.members.firstname like 'Dev';
```

```
select cd.members.memid, distinct cd.members.firstname from cd.members where  
cd.members.memid is not null;
```

--Q2

```
select cd.members.surname, cd.members.firstname, count(cd.members.surname) from  
cd.members  
group by cd.members.surname, cd.members.firstname having cd.members.surname is not null  
order by cd.members.surname, cd.members.firstname ;
```

--Q3

```
--select cd.members.surname, cd.members.firstname as 'Name' from cd.members right join  
cd.bookings on cd.bookings.memid = cd.members.memid where cd.bookings.facid in (select  
cd.facilities.facid from cd.facilities);`  
select * from cd.facilities  
select * from cd.bookings
```

```
--select cd.members.surname, cd.bookings.name) as 'Name' from cd.members right join  
cd.members on cd.members.memid = cd.bookings.memid where cd.bookings.facid in (select  
cd.facilities.facid from cd.facilities);
```

```
select cd.members.firstname, cd.members.surname, cd.bookings.facid into mem_book from  
cd.bookings full join cd.members on cd.members.memid = cd.bookings.memid;
```

```
select distinct (concat(mem_book.firstname, cd.facilities.name)) as Concat_Facility from  
mem_book right join cd.facilities on cd.facilities.facid = mem_book.facid order by  
Concat_Facility
```

--Q4

```
select * from cd.facilities where cd.facilities.guestcost > 1000;
```

--Q5

```
select cd.facilities.name, count(facilities.name) as Count_Facility ,  
count(cd.bookings.no_of_slots_booked) as Count_Booking from cd.bookings right join  
cd.facilities on cd.facilities.facid = cd.bookings.facid group by cd.facilities.name;
```

--Q6

```
select memid, surname, firstname, joindate
      from cd.members
      where joindate >= convert(timestamp,'2012-09-01')
```

--Q7

```
select cd.facilities.name, cd.facilities.facid, cd.bookings.no_of_slots_booked,
cd.bookings.memid into Facility_Table_mem from cd.bookings full join cd.facilities on
cd.facilities.facid = cd.bookings.facid
select* from Facility_Table
--select Facility_Table.facid from Facility_Table where max(Facility_Table.no_of_slots_booked)
= Facility_Table.no_of_slots_booked
```

```
SELECT Facility_Table.facid, MAX(Facility_Table.no_of_slots_booked)
FROM Facility_Table
GROUP BY Facility_Table.facid
```

--Q8

```
select cd.members.firstname, Facility_Table_mem.no_of_slots_booked, rank() over (partition by
Facility_Table_mem.no_of_slots_booked order by cd.members.firstname) as Rank1 from
Facility_Table_mem full join cd.members on cd.members.memid = Facility_Table_mem.facid
order by Rank1
```

--Q9 No of slots \* membercost

```
select cd.facilities.name, cd.facilities.facid, cd.facilities.membercost,
cd.bookings.no_of_slots_booked, cd.bookings.memid into Facility_Table_All from cd.bookings
full join cd.facilities on cd.facilities.facid = cd.bookings.facid
```

```
select Facility_Table_All.name, rank() over (partition by Facility_Table_All.no_of_slots_booked
order by cd.members.firstname) as Rank2,
(Facility_Table_All.no_of_slots_booked*Facility_Table_All.membercost) as Revenue from
Facility_Table_All full join cd.members on cd.members.memid = Facility_Table_All.memid order
by Rank2, Facility_Table_All.name
```