

Homework SQL

1. SELECT \* FROM cd.facilities;

	facid [PK] integer	name character varying (100)	membercost numeric	guestcost numeric	initialoutlay numeric	monthlymaintenance numeric
1	0	Tennis Court 1	5	25	10000	200
2	1	Tennis Court 2	5	25	8000	200
3	2	Badminton Court	0	15.5	4000	50
4	3	Table Tennis	0	5	320	10
5	4	Massage Room 1	35	80	4000	3000
6	5	Massage Room 2	35	80	4000	3000
7	6	Squash Court	3.5	17.5	5000	80
8	7	Snooker Table	0	5	450	15
9	8	Pool Table	0	5	400	15

2. SELECT  
name,  
membercost  
FROM cd.facilities;

	name character varying (100)	membercost numeric
1	Tennis Court 1	5
2	Tennis Court 2	5
3	Badminton Court	0
4	Table Tennis	0
5	Massage Room 1	35
6	Massage Room 2	35
7	Squash Court	3.5
8	Snooker Table	0
9	Pool Table	0








3. SELECT \*  
FROM cd.facilities  
WHERE membercost > 0;

	facid [PK] integer	name character varying (100)	membercost numeric	guestcost numeric	initialoutlay numeric	monthlymaintenance numeric
1	0	Tennis Court 1	5	25	10000	200
2	1	Tennis Court 2	5	25	8000	200
3	4	Massage Room 1	35	80	4000	3000
4	5	Massage Room 2	35	80	4000	3000
5	6	Squash Court	3.5	17.5	5000	80




4. SELECT  
facid,  
name,  
membercost,  
monthlymaintenance  
FROM cd.facilities  
WHERE  
membercost > 0  
AND membercost < (monthlymaintenance/50);

	facid [PK] integer	name character varying (100)	membercost numeric	monthlymaintenance numeric
1	4	Massage Room 1	35	3000
2	5	Massage Room 2	35	3000

5. SELECT \*  
FROM cd.facilities  
WHERE name ILIKE '%tennis%';

Data Output		Explain	Messages	Notifications		
 facid [PK] integer 	name character varying (100) 	membercost numeric 	guestcost numeric 	initialoutlay numeric 	monthlymaintenance numeric 	
1	0 Tennis Court 1	5	25	10000	200	
2	1 Tennis Court 2	5	25	8000	200	
3	3 Table Tennis	0	5	320	10	

```
6. SELECT *
FROM cd.facilities
WHERE facid IN (1, 5);
```

Data Output		Explain	Messages	Notifications		
	facid  [PK] integer	name  character varying (100)	membercost  numeric	guestcost  numeric	initialoutlay  numeric	monthlymaintenance  numeric
1	1	Tennis Court 2	5	25	8000	200
2	5	Massage Room 2	35	80	4000	3000

```
7. SELECT
    memid,
    surname,
    firstname,
    joindate
FROM cd.members
WHERE joindate >= '2012-09-01';
```

Data Output		Explain	Messages	Notifications
	memid [PK] integer	surname character varying (200)	firstname character varying (200)	joindate timestamp without time zone
1	24	Sarwin	Ramnaresh	2012-09-01 08:44:42
2	26	Jones	Douglas	2012-09-02 18:43:05
3	27	Rumney	Henrietta	2012-09-05 08:42:35
4	28	Farrell	David	2012-09-15 08:22:05
5	29	Worthington-Smyth	Henry	2012-09-17 12:27:15
6	30	Purview	Millicent	2012-09-18 19:04:01
7	33	Tupperware	Hyacinth	2012-09-18 19:32:05
8	35	Hunt	John	2012-09-19 11:32:45
9	36	Crumpet	Erica	2012-09-22 08:36:38

```
8. SELECT
    DISTINCT surname
FROM cd.members
ORDER BY 1
LIMIT 10;
```

	surname character varying (200)
1	Bader
2	Baker
3	Boothe
4	Butters
5	Coplin
6	Crumpet
7	Dare
8	Farrell
9	Genting

```
9. SELECT MAX(joindate)
FROM cd.members;
```

	max timestamp without time zone
1	2012-09-26 18:08:45

10. SELECT COUNT(\*)  
FROM cd.facilities  
WHERE guestcost >= 10;

	count bigint	
1	6	

11. SELECT  
    facid,  
    SUM(slots) AS total\_slots  
FROM cd.bookings  
WHERE  
    starttime BETWEEN '2012-09-01' AND '2012-10-01'  
GROUP BY 1  
ORDER BY 2;

	facid integer		total_slots bigint	
1		5		122
2		3		422
3		7		426
4		8		471
5		6		540
6		2		570
7		1		588
8		0		591
9		4		648

12. SELECT  
    f.facid,  
    SUM(b.slots) AS Total\_Slots  
FROM cd.facilities AS f  
FULL OUTER JOIN cd.bookings AS b  
ON f.facid = b.facid  
GROUP BY 1  
HAVING SUM(b.slots) > 1000  
ORDER BY 1;

	facid [PK] integer		total_slots bigint	
1		0		1320
2		1		1278
3		2		1209
4		4		1404
5		6		1104

13. SELECT  
    b.starttime AS start,  
    f.name  
FROM cd.bookings b  
INNER JOIN cd.facilities f  
ON b.facid = f.facid  
WHERE  
    name ILIKE '%tennis court%'  
    AND b.starttime BETWEEN '2012-09-21' AND '2012-09-22'  
ORDER BY 1;

	start timestamp without time zone	name character varying (100)
1	2012-09-21 08:00:00	Tennis Court 1
2	2012-09-21 08:00:00	Tennis Court 2
3	2012-09-21 08:00:00	Tennis Court 1
4	2012-09-21 08:00:00	Tennis Court 2
5	2012-09-21 08:30:00	Tennis Court 1
6	2012-09-21 08:30:00	Tennis Court 2
7	2012-09-21 08:30:00	Tennis Court 1
8	2012-09-21 08:30:00	Tennis Court 2
9	2012-09-21 08:30:00	Tennis Court 1

14. SELECT

```
m.memid,  
m.surname,  
m.firstname,  
m.joindate,  
b.starttime  
FROM cd.members m  
FULL OUTER JOIN cd.bookings b  
ON m.memid=b.memid  
WHERE  
m.firstname ILIKE '%david%' AND  
m.surname ILIKE '%Farrell';
```

	memid integer	surname character varying (200)	firstname character varying (200)	joindate timestamp without time zone	starttime timestamp without time zone
1	28	Farrell	David	2012-09-15 08:22:05	2012-09-18 09:00:00
2	28	Farrell	David	2012-09-15 08:22:05	2012-09-18 13:30:00
3	28	Farrell	David	2012-09-15 08:22:05	2012-09-18 17:30:00
4	28	Farrell	David	2012-09-15 08:22:05	2012-09-18 20:00:00
5	28	Farrell	David	2012-09-15 08:22:05	2012-09-19 09:30:00
6	28	Farrell	David	2012-09-15 08:22:05	2012-09-19 12:00:00
7	28	Farrell	David	2012-09-15 08:22:05	2012-09-19 15:00:00
8	28	Farrell	David	2012-09-15 08:22:05	2012-09-20 11:30:00
9	28	Farrell	David	2012-09-15 08:22:05	2012-09-20 14:00:00