My SQL Assignment

1) Write a query to display the policytypeid, policytypename, description of all the car's policy details.

SELECT policy_type_id,policy_type_name,description **FROM** policy_sub_types pst **LEFT JOIN** ref_policy_types rpt **ON** pst.policy_type_code = rpt.policy_type_code **WHERE** rpt.policy_type_name = "car";

policy_type_id	policy_type_name	description
6893	car	theft
6894	car	accident

2) Write a query to display the policytypecode,no of polycies in each code with alias name NO_OF_POLICIES.

SELECT policy_type_code, **COUNT**(policy_type_code) **AS** NO_OF_POLICIES **FROM** policy_sub_types **GROUP BY** policy_type_code;

policy_type_code	NO_OF_POLICIES
58539	1
58683	2
58934	2

3) Write a query to display the userid,firstname,lastname, email,mobileno who are residing in Chennai.

SELECT user_id,firstname,lastname,email,mobileno **FROM** user_details ud

LEFT JOIN address_details ad **ON** ud.address_id = ad.address_id

WHERE ad.city="chennai";

User_id	firstname	lastname	email	mobileno
1111	raju	reddy	raju@gmail.com	9854261456

4) Write a query to display the userid, firstname lastname with alias name USER_NAME,email,mobileno who has taken the car polycies.

SELECT user_id,**CONCAT**(firstname,' ',lastname) **AS** USER_NAME,email,mobileno **FROM** user_details **WHERE** user_id in (**SELECT** user_id **FROM** user_policies up **LEFT JOIN** policy_sub_types pst **ON** up.policy_type_id = pst.policy_type_id **WHERE** pst.policy_type_code = 58934);

User_id	USER_NAME	email	mobileno
1111	raju reddy	raju@gmail.com	9854261456
2222	vamsi krishna	vamsi@gmail.com	9854261463
3333	naveen reddy	naveen@gmail.com	9854261496

5) Write a query to display the userid, firstname,last name who has taken the car policies but not home ploicies.

SELECT DISTINCT u.user_id,u.firstname,u.lastnam **FROM** user_details u **JOIN** user_policies up **ON** u.user_id = up.user_id **JOIN** policy_sub_types pst **ON** up.policy_type_id = pst.policy_type_id **JOIN** ref_policy_types rpt **ON** pst.policy_type_code = rpt.policy_type_code **WHERE** rpt.policy_type_name = 'car' **AND** u.user_id **NOT IN** (**SELECT** up2.user_id **FROM** user_policies up2 **JOIN** policy_sub_types pst2 **ON** up2.policy_type_id = pst2.policy_type_id **JOIN** ref_policy_types rpt2 **ON** pst2.policy_type_code = rpt2.policy_type_code **WHERE** rpt2.policy_type_name = 'home');

User_id	firstname	lastname
2222	vamsi	krishna
3333	naveen	reddy

6) Write a query to display the policytypecode, policytype name which policytype has maximum no of policies.

```
SELECT rpt.policy_type_code, rpt.policy_type_name FROM
ref_policy_types rpt JOIN (SELECT policy_type_code, COUNT(*) AS
policy_count FROM policy_sub_types GROUP BY policy_type_code) cnt
ON rpt.policy_type_code = cnt.policy_type_code WHERE
cnt.policy_count = (SELECT MAX(policy_count) FROM (SELECT COUNT(*)
 AS policy_count FROM policy_sub_types  GROUP BY policy_type_code)
x);
```

policy_type_code	policy_type_name
58683	life
58934	car

7) Write a query to display the userid, firtsname, lastname, city state whose city is ending with 'bad'.

```
SELECT ud.user_id,ud.firstname,ud.lastname,ad.city,ad.state FROM
user_details ud JOIN address_details ad ON ud.address_id =
ad.address_id WHERE ad.city LIKE "%bad";
```

User_id	firstname	lastname	city	state
2222	vamsi	krishna	hyderabad	andhrapradesh

8) Write a query to display the userid, firstname, lastname ,ploicyno, dateregistered who has registered before may 2012.

```
SELECT ud.user_id,ud.firstname,ud.lastname,up.policy_no,
up.date_registered FROM user_details ud JOIN user_policies up ON
ud.user_id=up.user_id WHERE date_registered <'2012-05-01';
```

User_id	firstname	lastname	policy_no	date_registered
1111	raju	reddy	689314	1994-04-18
4444	raghava	rao	689420	2012-04-09

9) Write a query to display the userid, firstname, lastname who has taken more than one policies.

SELECT ud.user_id,ud.firstname,ud.lastname **FROM** user_details ud **JOIN** (**SELECT** user_id,**COUNT**(*) count_policies **FROM** user_policies **GROUP BY** user_id) uc **ON** ud.user_id = uc.user_id **WHERE** uc.count_policies > 1;

User_id	firstname	lastname
1111	raju	reddy

10) Write a query to display the policytypecode, policytypename, policytypeid, userid, ploicyno whose maturity will fall in the month of august 2013.

SELECT rpt.policy_type_code, rpt.policy_type_name, ps.policy_type_id, up.user_id, up.policy_no **FROM** user_policies up
JOIN policy_sub_types ps **ON** up.policy_type_id = ps.policy_type_id
JOIN ref_policy_types rpt **ON** ps.policy_type_code = rpt.policy_type_code
WHERE DATE_ADD(up.date_registered, **INTERVAL** ps.maturityperiod **YEAR**)
BETWEEN '2013-08-01' **AND** '2013-08-31';

11) Write a query to display the policytypecode, policytypename, policytypeid whose maturity amount is the double than the total paid amount.

SELECT DISTINCT ps.policy_type_code, rpt.policy_type_name, ps.policy_type_id **FROM** policy_sub_types ps
JOIN ref_policy_types rpt **ON** ps.policy_type_code = rpt.policy_type_code
JOIN user_policies up **ON** ps.policy_type_id = up.policy_type_id
JOIN policy_payments pp **ON** up.policy_no = pp.policy_no
GROUP BY ps.policy_type_code, rpt.policy_type_name, ps.policy_type_id, ps.maturityamount
HAVING ps.maturityamount = 2 * **SUM**(pp.amount);

12) Write a query to display the userid, total amount paid by the customer with alias name total_amount.

SELECT user_id,**SUM**(amount + **COALESCE**(fine,0)) **AS** total_amount **FROM** policy_payments **GROUP BY** user_id;

User_id	Total_amount
1111	390200
4444	100000
3333	20000
2222	20000

13) Write a query to display the user_id, policy_no, total amount paid by the customer for the each policies.

SELECT user_id, policy_no, **SUM**(amount + **COALESCE**(fine,0)) **AS** total_amount **FROM** policy_payments **GROUP BY** user_id, policy_no;

User_id	Policy_no	Total_amount
1111	689314	350200
4444	689420	100000
1111	689316	20000
3333	689320	20000
1111	689317	20000
2222	689318	20000

14) Write a query to display the user_id, policy_no, balance_amount for each policies.

SELECT up.user_id, up.policy_no, x.maturityamount - ta.total_amount **AS** Balance Amount **FROM** user_policies up **JOIN** (**SELECT** policy_no,**SUM**(amount + **COALESCE**(fine,0)) **AS** total_amount **FROM** policy_payments **GROUP BY** policy_no) ta **ON** up.policy_no = ta.policy_no **JOIN** (**SELECT** policy_type_id,maturityamount **FROM** policy_sub_types) x **ON** up.policy_type_id = x.policy_type_id;

User_id	Policy_no	Balance amount
1111	689314	1149800
1111	689316	480000
1111	689317	180000
2222	689318	180000
3333	689320	180000
4444	689420	1400000

15) write a query to display the user_id,policy_no, balancepayment years with alias name BALANCE_YEARS for all the customer for each policies.

SELECT up.user_id, up.policy_no, (ps.yearsofpayements - **COUNT**(pp.receipno)) **AS** BALANCE_YEARS **FROM** user_policies up **JOIN** policy_sub_types ps **ON** up.policy_type_id = ps.policy_type_id **LEFT JOIN** policy_payments pp **ON** up.policy_no = pp.policy_no **GROUP BY** up.user_id, up.policy_no, ps.yearsofpayements;

User_id	Policy_no	Balance amount
1111	689314	0
1111	689316	0
1111	689317	0
2222	689318	0
3333	689320	0
4444	689420	5

16) Write a query to display the user details userid,firstname,last who has taken car, home and life loans.

SELECT ud.user_id,ud.firstname,ud.lastname **FROM** user_details ud

JOIN user_policies up **ON** ud.user_id = up.user_id

JOIN policy_sub_types pst **ON** up.policy_type_id = pst.policy_type_id

JOIN ref_policy_types rpt **ON** pst.policy_type_code = rpt.policy_type_code

WHERE rpt.policy_type_name **IN** ('car','home','life') **GROUP BY** ud.user_id,ud.firstname,ud.lastname

HAVING COUNT(**DISTINCT** rpt.policy_type_name) = 3;

User_id	firstname	lastname
1111	raju	reddy

17) Write a query to select policy_type_code,total amount paid by all the customers with alias name total_amount for each policy department.

SELECT ps.policy_type_code, **SUM**(pp.amount) **AS** total_amount
FROM policy_payments pp **JOIN** user_policies up **ON** pp.policy_no = up.policy_no **JOIN** policy_sub_types ps **ON** up.policy_type_id = ps.policy_type_id **GROUP BY** ps.policy_type_code;

Policy_type_code	Total_amount
58683	450000
58539	20000
58934	60000

18) Write a query to select user_id,user_name,policy_type_code, policy_type_id of users who has registered more than one policy type unde same policy code.

SELECT u.user_id, **CONCAT**(u.firstname,' ',u.lastname) **AS** user_name, ps.policy_type_code, ps.policy_type_id **FROM** user_details u
JOIN user_policies up **ON** u.user_id = up.user_id
JOIN policy_sub_types ps **ON** up.policy_type_id = ps.policy_type_id
GROUP BY u.user_id, user_name, ps.policy_type_code
HAVING COUNT(**DISTINCT** ps.policy_type_id) > 1;

19)Write a query to display the policy_type_code,policytype name in which policy department has min number of policies registered.

```
SELECT rpt.policy_type_code, rpt.policy_type_name FROM ref_policy_types
rpt JOIN policy_sub_types ps ON rpt.policy_type_code = ps.policy_type_code
GROUP BY rpt.policy_type_code, rpt.policy_type_name HAVING COUNT(*) = (
SELECT MIN(cnt) FROM ( SELECT COUNT(*) cnt FROM policy_sub_types
GROUP BY policy_type_code ) t );
```

policy_type_code	policy_type_name
58539	home

20) Write a query to display the user_id,user_name, address,phoneno, policytypecode,policytypeid,policytypename, who has complemented all payements for the policies.

```
SELECT u.user_id, CONCAT(u.firstname,' ',u.lastname) AS user_name,
a.addressline1 AS address, u.mobileno AS phoneno, ps.policy_type_code,
ps.policy_type_id, rpt.policy_type_name FROM user_details u
JOIN address_details a ON u.address_id = a.address_id
JOIN user_policies up ON u.user_id = up.user_id
JOIN policy_sub_types ps ON up.policy_type_id = ps.policy_type_id
JOIN ref_policy_types rpt ON ps.policy_type_code = rpt.policy_type_code
JOIN policy_payments pp ON up.policy_no = pp.policy_no
GROUP BY u.user_id, up.policy_no, ps.yearsofpayements
HAVING COUNT(pp.receipno) = ps.yearsofpayements;
```

User_id	USER_NAME	address	phoneno	Policy_ type_code	Policy_ type_id	policy_ type_ name
1111	raju reddy	sholinganur	9854261456	58683	6896	life
1111	raju reddy	sholinganur	9854261456	58539	6895	home
3333	naveen reddy	iroli	9854261496	58934	6894	car
1111	raju reddy	sholinganur	9854261456	58934	6894	car
2222	vamsi krishna	kphb	9854261463	58934	6894	car

21) write a query to display the user_id, user_name, address,phoneno,policytypecode,policytypeid,policytypename,date ofd register who has registered latest 2.

```
SELECT u.user_id, CONCAT(u.firstname,' ',u.lastname) AS user_name,
a.addressline1 AS address, u.mobileno AS phoneno, ps.policy_type_code,
ps.policy_type_id, rpt.policy_type_name, up.date_registered
FROM user_policies up JOIN user_details u ON up.user_id = u.user_id
JOIN address_details a ON u.address_id = a.address_id
JOIN policy_sub_types ps ON up.policy_type_id = ps.policy_type_id
JOIN ref_policy_types rpt ON ps.policy_type_code = rpt.policy_type_code
ORDER BY up.date_registered DESC LIMIT 2;
```

User_ id	USER_ NAME	address	Phoneno	Policy_ type_ code	Policy_ type_ id	policy_ type_ name	Date_ registered
2222	vamsi krishna	kphb	9854261463	58934	6894	car	2012-06-21
1111	raju reddy	sholinganur	9854261456	58934	6894	car	2012-06-20