2)Write a query in SQL to find the name of patients and their physicians who does not require any assistance of a nurse.

1)Write a query in SQL to obtain the name of the physician and the departments they are affiliated with.

```
mysql> select pa.name as patient_name,ph.name as physician_name from patient as pa,physiciane as ph,appointment as a where a.physician=ph.employeeid and pa.ssn=a.patient and a.prepnurse is null;
+--------------+----------------+
| patient_name | physician_name |
+--------------+----------------+
| Dennis Doe   | Percival Cox   |
| John Smith   | Christopher Turk |
+--------------+----------------+
2 rows in set (0.00 sec)

mysql> select p.name as patient_name,d.name as department_name from physiciane as p,department as d,affiliated_with as a where p.employeeid=a.physician and d.departmentid=a.department;
+------------------+------------------+
| patient_name     | department_name  |
+------------------+------------------+
| John Dorian      | General Medicine |
| Elliot Reid      | General Medicine |
| Christopher Turk | General Medicine |
| Percival Cox     | General Medicine |
| Bob Kelso        | General Medicine |
| John Wen         | General Medicine |
| Keith Dudemeister | General Medicine |
| Christopher Turk | Surgery          |
| Todd Quinlan     | Surgery          |
| John Wen         | Surgery          |
| Molly Clock      | Psychiatry       |
+------------------+------------------+
11 rows in set (0.00 sec)

mysql>
```

3) Write a query in SQL to find the name of the patients, their treating physicians and medication.

4)Write a query in SQL to find the name of the patients who taken an advanced appointment, and also display their physicians and medication.

```
mysql> select ph.name as physician_name,pa.name as patient_name,m.name as medication_name from physiciane as ph,patient as pa,medication as m,prescribes as pr where pr.patient=pa.ssn and pr.physician=ph.employee
id and pr.medication=m.code;
+----------------+--------------+-----------------+
| physician_name | patient_name | medication_name |
+----------------+--------------+-----------------+
| John Dorian    | John Smith   | Procrastin-X    |
| Molly Clock    | Dennis Doe   | Thesisin        |
| Molly Clock    | Dennis Doe   | Thesisin        |
+----------------+--------------+-----------------+
3 rows in set (0.00 sec)

mysql> select ph.name as physician_name,pa.name as patient_name,m.name as medication_name from physiciane as ph,patient as pa,medication as m,prescribes as pr where pr.patient=pa.ssn and pr.physician=ph.employee
id and pr.medication=m.code and pr.appointment is not null;
+----------------+--------------+-----------------+
| physician_name | patient_name | medication_name |
+----------------+--------------+-----------------+
| John Dorian    | John Smith   | Procrastin-X    |
| Molly Clock    | Dennis Doe   | Thesisin        |
+----------------+--------------+-----------------+
2 rows in set (0.00 sec)

mysql>
```

5)Write a query in SQL to obtain the name of the patients, their block, floor, and room number where they are admitted.

```
mysql> select pa.name,s.room,r.blockfloor,blockcode from patient as pa,stay as s,room as r where s.patient=pa.ssn and s.room=r.roomnumber;
+------------------+------+-----------+-----------+
| name             | room | blockfloor | blockcode |
+------------------+------+-----------+-----------+
| John Smith       | 111  |         1 |         2 |
| Random J. Patient | 123  |         1 |         3 |
| Dennis Doe       | 112  |         1 |         2 |
+------------------+------+-----------+-----------+
3 rows in set (0.00 sec)
```

6)Write a query in SQL to make a report which will show - a) name of the patient, b) name of the physician who is treating him or her,c) name of the nurse who is attending him or her,d) which treatment is going on to the patient, e) the date of release, f) in which room the patient has admitted and which floor and block the room belongs to respectively.

```
mysql> SELECT p.name as patient,phy.name as physician,n.name as nurse,st.stayend as release_date,pr.name as treatement,r.roomnumber as room,r.blockfloor as floor,r.blockcode as block FROM undergoes
    -> as u JOIN patient as p ON u.patient=p.ssn JOIN physiciane as phy ON u.physician=phy.employeeid LEFT JOIN nurse as n ON u.assistingnurse=n.employeeid
    -> JOIN stay as st ON u.patient=st.patient JOIN room as r ON st.room=r.roomnumber JOIN procedures as pr on u.procedures=pr.code;
+------------+-----------------+----------------+---------------------+---------------------------+------+-------+-------+
| patient    | physician       | nurse          | release_date        | treatement                | room | floor | block |
+------------+-----------------+----------------+---------------------+---------------------------+------+-------+-------+
| John Smith | John Wen        | Carla Espinosa | 2008-05-04 00:00:00 | Obtuse Pyloric Recombobulation | 111 |   1   |   2   |
| John Smith | Christopher Turk | Carla Espinosa | 2008-05-04 00:00:00 | Reversible Pancreomyoplasty | 111 |   1   |   2   |
| John Smith | John Wen        | Carla Espinosa | 2008-05-04 00:00:00 | Follicular Demiectomy      | 111 |   1   |   2   |
| Dennis Doe | Christopher Turk | Laverne Roberts | 2008-05-03 00:00:00 | Reverse Rhinopodoplasty   | 112 |   1   |   2   |
| Dennis Doe | Christopher Turk | Paul Flowers   | 2008-05-03 00:00:00 | Complete Walletectomy      | 112 |   1   |   2   |
| Dennis Doe | Todd Quinlan    | NULL           | 2008-05-03 00:00:00 | Obfuscated Dermogastrotomy | 112 |   1   |   2   |
+------------+-----------------+----------------+---------------------+---------------------------+------+-------+-------+
6 rows in set (0.01 sec)

mysql>
```

7)Write a query in SQL to obtain the name and position of all physicians who completed a medical procedure with certification after the date of expiration of their certificate.

```
mysql> SELECT name as physician,position FROM physiciane WHERE employeeid IN (SELECT physician FROM undergoes as u WHERE dateundergoes>
    -> (SELECT certificationexpires FROM trained_in as tr WHERE tr.physician = u.physician and tr.treatment = u.procedures));
+--------------+----------------------------+
| physician    | position                   |
+--------------+----------------------------+
| Todd Quinlan | Surgical Attending Physician |
+--------------+----------------------------+
1 row in set (0.02 sec)

mysql>
```

8)Write a query in SQL to Obtain the names of all patients who had at least two appointment where the nurse who prepped the appointment was a registered nurse and the physician who has carried out primary care.

```
mysql> SELECT p.name as patient,phy.name as physician,n.name as nurse FROM appointment as a JOIN patient as p ON a.patient=p.ssn JOIN nurse as n ON a.prepnurse=n.employeeid
    -> JOIN physiciane as phy ON p.pcp=phy.employeeid WHERE a.patient IN
    -> (SELECT patient FROM appointment as a GROUP BY a.patient HAVING count(*)>=2) AND n.registered=1;
+---------------+-----------------+----------------+
| patient       | physician       | nurse          |
+---------------+-----------------+----------------+
| John Smith    | John Dorian     | Carla Espinosa |
| Grace Ritchie | Elliot Reid     | Carla Espinosa |
| Grace Ritchie | Elliot Reid     | Carla Espinosa |
| John Smith    | John Dorian     | Laverne Roberts |
| Dennis Doe    | Christopher Turk | Laverne Roberts |
+---------------+-----------------+----------------+
5 rows in set (0.01 sec)

mysql>
```

9)Write a query in SQL to obtain the names of all patients who has been undergone a procedure costing more than $5,000 and the name of that physician who has carried out primary care.

10)Write a query in SQL to Obtain the names of all patients who has been prescribed some medication by his/her physician who has carried out primary care and the name of that physician.

```
mysql> SELECT p.name as patient,phy.name as physician, pc.cost as procedure_cost FROM patient as p JOIN undergoes as u ON u.patient=p.ssn JOIN physiciane as phy
    -> ON p.pcp=phy.employeeid JOIN PROCEDURES as pc ON u.procedures=pc.code WHERE pc.cost>5000;
+------------+------------------+----------------+
| patient    | physician        | procedure_cost |
+------------+------------------+----------------+
| Dennis Doe | Christopher Turk |          10000 |
| John Smith | John Dorian      |           5600 |
+------------+------------------+----------------+
2 rows in set (0.07 sec)

mysql> SELECT p.name as patient,phy.name as physician FROM patient as p JOIN prescribes as pr ON pr.patient=p.ssn JOIN physiciane as phy ON p.pcp=phy.employeeid
    -> WHERE p.pcp=pr.physician AND p.pcp=phy.employeeid;
+------------+-------------+
| patient    | physician   |
+------------+-------------+
| John Smith | John Dorian |
+------------+-------------+
1 row in set (0.17 sec)

mysql>
```