1. select * from nurse where registered = 0;

employeeid	name	position	registered	ssn
103	Charity Burbage	Nurse	0	333333330
104	Nevio Narratys	Nurse	0	555555550
105	Nymor Martell	Nurse	0	666666660
NULL	NULL	NULL	NULL	NULL

2. select name as `name`, position as Position from nurse where position = 'Head Nurse';

name	Position
Poppy Pomfrey	Head Nurse

3. select d.name as Department, p.name as physician from department as d inner join physician as p on d.head = p.employeeid;

Department	physician
General Medicine	Horace Slughorn
Surgery	Herbert Beery
Psychiatry	Rolanda Hooch

4. select count(distinct patient) as "Number of patients taken at least one appointment" from appointment;

Number of patients taken at least one appointment
4

5. select blockfloor as Floor, blockcode as `Block` from room where roomnumber = 212;

Floor	Block
2	2

6. select count(roomnumber) as "Number of available rooms" from room where unavailable = false;

Number of available rooms
29

7. select count(roomnumber) as "Number of available rooms" from room where unavailable = true;

Number of available rooms
7

8. select p.name as Physician, d.name as Department from physician as p inner join affiliated_with as aw on p.employeeid = aw.physician inner join department as d on aw.department = d.departmentid;

Physician	Department
Filius Flitwick	General Medicine
Neville Longbottom	General Medicine
Minerva McGonagall	General Medicine
Horace Slughorn	General Medicine
Severus Snape	General Medicine
Herbert Beery	General Medicine
Cuthbert Binns	General Medicine
Minerva McGonagall	Surgery
Pomona Sprout	Surgery
Herbert Beery	Surgery
Rolanda Hooch	Psychiatry

9.select p.name as Physician, pro.name as Treatment from physician as p inner join trained_in as ti on p.employeeid = ti.physician inner join `procedure` as pro on pro.`code`= ti.treatment;

Physician	Treatment
Minerva McGonagall	Reverse Rhinopodoplasty
Herbert Beery	Reverse Rhinopodoplasty
Minerva McGonagall	Obtuse Pyloric Recombobulation
Pomona Sprout	Obtuse Pyloric Recombobulation
Herbert Beery	Obtuse Pyloric Recombobulation
Herbert Beery	Folded Demiophtalmectomy
Herbert Beery	Complete Walletectomy
Minerva McGonagall	Obfuscated Dermogastrotomy
Pomona Sprout	Obfuscated Dermogastrotomy
Herbert Beery	Obfuscated Dermogastrotomy
Minerva McGonagall	Reversible Pancreomyoplasty
Pomona Sprout	Reversible Pancreomyoplasty
Herbert Beery	Reversible Pancreomyoplasty
Minerva McGonagall	Follicular Demiectomy
Herbert Beery	Follicular Demiectomy

10. select phy.name as Physican, phy.position as position, d.name as Department from physician as phy inner join affiliated_with as aw on phy.employeeid = aw.physician inner join department as d on aw.department = d.departmentid where aw.primaryaffiliation = false;

Physican	position	Department
Minerva McGonagall	Surgical Attending Physician	General Medicine
Herbert Beery	Surgical Attending Physician	General Medicine

11. select `name` as Physician, `position` as Designation from physician where employeeid not in (select physician from trained_in);

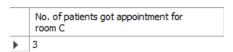| Physician	Designation
Filius Flitwick	Staff Internist
Neville Longbottom	Attending Physician
Horace Slughorn	Senior Attending Physician
Severus Snape	Head Chief of Medicine
Cuthbert Binns	MD Resident
Rolanda Hooch	Attending Psychiatrist

12. select pat.name as Patient , pat.address as Address, phy.name as Physician from patient as pat inner join physician as phy on pat.pcp = phy.employeeid;

Patient	Address	Physician
Patrek Vance	42 Foobar Lane	Filius Flitwick
Paxter Redwyne	37 Snafu Drive	Neville Longbottom
Patrice Hightower	101 Omgbbq Street	Neville Longbottom
Pereno Pendaerys	1100 Foobaz Avenue	Minerva McGonagall

13. select pat.name as patient, count(app.physician) as "Appointment for No. of Physicians" from patient as pat inner join appointment as app on pat.ssn = app.patient group by pat.ssn;

patient	Appointment for No. of Physicians
Patrek Vance	3
Paxter Redwyne	2
Patrice Hightower	1
Pereno Pendaerys	3

14. select count(distinct patient) as "No. of patients got appointment for room C" from appointment where examinationroom = 'c';

No. of patients got appointment for room C
3

15. select pat.name as Patient, app.examinationroom as "Room No.",
app.start_dt_time as "Date and Time of appointment"
from patient as pat
inner join appointment as app on pat.ssn = app.patient;

	Patient	Room No.	Date and Time of appointment
▶	Patrek Vance	A	2021-04-24 10:00:00
	Patrek Vance	A	2021-04-25 10:00:00
	Patrek Vance	C	2021-04-26 12:00:00
	Paxter Redwyne	B	2021-04-24 10:00:00
	Paxter Redwyne	B	2021-04-27 10:00:00
	Patrice Hightower	C	2021-04-26 11:00:00
	Pereno Pendaerys	B	2021-04-25 10:00:00
	Pereno Pendaerys	C	2021-04-26 10:00:00
	Pereno Pendaerys	A	2021-04-27 10:00:00

16. select n.name as "Name of the Nurse", app.examinationroom as "Room No."
from nurse as n inner join appointment as app
on n.employeeid = app.prepnurse;

	Name of the Nurse	Room No.
▶	Poppy Pomfrey	A
	Poppy Pomfrey	B
	Poppy Pomfrey	B
	Bathsheda Babbling	A
	Bathsheda Babbling	A
	Charity Burbage	B
	Charity Burbage	C

17. select pat.name as Patient, n.name as Nurse, phy.name as Physician,
app.examinationroom as "Room No.", app.start_dt_time as `Schedule`
from patient as pat inner join appointment as app
on pat.ssn = app.patient
inner join nurse as n
on app.prepnurse = n.employeeid
inner join physician as phy
on app.physician = phy.employeeid
where app.start_dt_time = "2021-04-25 10:00";

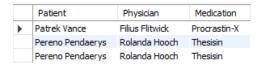|	Patient	Nurse	Physician	Room No.	Schedule
▶	Patrek Vance	Bathsheda Babbling	Filius Flitwick	A	2021-04-25 10:00:00
	Pereno Pendaerys	Charity Burbage	Horace Slughorn	B	2021-04-25 10:00:00

18. select pat.name as Patient, phy.name as Physician, app.examinationroom as "Room No."
from patient as pat
inner join appointment as app
on pat.ssn = app.patient
inner join physician as phy
on app.physician = phy.employeeid

where app.prepnurse IS NULL;

	Patient	Physician	Room No.
▶	Pereno Pendaerys	Horace Slughorn	C
	Patrek Vance	Minerva McGonagall	C

19. select pat.name as Patient, phy.name as Physician, med.name as Medication
from patient as pat
inner join prescribes as pre
on pat.ssn = pre.patient
inner join physician as phy
on pre.physician = phy.employeeid
inner join medication as med
on pre.medication = med.code;

	Patient	Physician	Medication
▶	Patrek Vance	Filius Flitwick	Procrastin-X
	Pereno Pendaerys	Rolanda Hooch	Thesisin
	Pereno Pendaerys	Rolanda Hooch	Thesisin

20. select pat.name as Patient , phy.name as Physician, med.name as Medication
from patient as pat
inner join prescribes as pre
on pat.ssn = pre.patient
inner join physician as phy
on pre.physician = phy.employeeid
inner join medication as med
on pre.medication = med.code
where pre.appointment IS NOT NULL;

	Patient	Physician	Medication
▶	Patrek Vance	Filius Flitwick	Procrastin-X
	Pereno Pendaerys	Rolanda Hooch	Thesisin

21. select pat.name as Patient , phy.name as Physician, med.name as Medication
from patient as pat
inner join prescribes as pre
on pat.ssn = pre.patient
inner join physician as phy
on pre.physician = phy.employeeid

inner join medication as med

on pre.medication = med.code

where pre.appointment IS NULL;

Patient	Physician	Medication
Pereno Pendaerys	Rolanda Hooch	Thesisin

22. select blockcode as 'Block' , count(blockcode) as "Number of available rooms"

from room where unavailable = false

group by blockcode

order by blockcode;

Block	Number of available rooms
1	9
2	10
3	10

23. select blockfloor as 'floor' , count(blockfloor) as "Number of available rooms"

from room where unavailable = false

group by blockfloor

order by blockfloor;

floor	Number of available rooms
1	8
2	7
3	7
4	7

24. select blockfloor as Floor, blockcode as 'Block', count(*) as "Number of available rooms"

from room where unavailable = false

group by blockfloor, blockcode

order by blockfloor, blockcode;

Floor	Block	Number of available rooms
1	1	3
1	2	2
1	3	3
2	1	2
2	2	2
2	3	3
3	1	2
3	2	3
3	3	2
4	1	2
4	2	3
4	3	2

25. select blockfloor as Floor, blockcode as 'Block', count(*) as "Number of unavailable rooms"

from room where unavailable = true

group by blockfloor, blockcode

order by blockfloor, blockcode;

	Floor	Block	Number of unavailable rooms
▶	1	2	1
	2	1	1
	2	2	1
	3	1	1
	3	3	1
	4	1	1
	4	3	1

26.select blockfloor as Floor, count(blockfloor) as "Number of available rooms"

from room where unavailable = false

group by blockfloor

having count(blockfloor)=

(select count(blockfloor) from room where unavailable = false

group by blockfloor order by count(blockfloor) desc limit 1)

order by blockfloor;

	Floor	Number of available rooms
▶	1	8

27. select blockfloor as Floor, count(blockfloor) as "Number of available rooms"

from room where unavailable = false

group by blockfloor

having count(blockfloor)=

(select count(blockfloor) from room where unavailable = false

group by blockfloor order by count(blockfloor) ASC limit 1)

order by blockfloor;

	Floor	Number of available rooms
▶	2	7
	3	7
	4	7

28. select pat.name as Patient, room.blockcode as 'Block', room.blockfloor as Floor, stay.room as Room

from patient as pat

inner join stay on pat.ssn = stay.patient

inner join room on stay.room = room.roomnumber;

	Patient	Block	Floor	Room
▶	Patrek Vance	2	1	111
	Patrice Hightower	3	1	123
	Pereno Pendaerys	2	1	112

29. select n.name as Nurse, oc.blockcode as Block

from nurse as n inner join on_call as oc

on n.employeeid = oc.nurse;

	Nurse	Block
▶	Poppy Pomfrey	1
	Poppy Pomfrey	2
	Bathsheda Babbling	3
	Charity Burbage	1
	Charity Burbage	2
	Charity Burbage	3

30. select pat.name as Patient, phy.name as Physician, n.name as Nurse, pro.name as `Procedure`,

stay.end_time as "Date of release", stay.room as Room,

room.blockfloor as Floor, room.blockcode as 'Block'

from patient as pat

inner join undergoes as u

on pat.ssn = u.patient

inner join physician as phy

on u.physician = phy.employeeid

inner join nurse as n

on u.assistingnurse = n.employeeid

left join trained_in as ti

on phy.employeeid = ti.physician

AND u.procedure = ti.treatment

inner join `procedure` as pro

on u.procedure = pro.code

inner join stay

on u.stay = stay.stayid

inner join room

on stay.room = room.roomnumber;

	Patient	Physician	Nurse	Procedure	Date of release	Room	Floor	Block
▶	Patrek Vance	Minerva McGonagall	Poppy Pomfrey	Reversible Pancreomyoplasty	2021-05-04 00:00:00	111	1	2
	Patrek Vance	Herbert Beery	Poppy Pomfrey	Obtuse Pyloric Recombobulation	2021-05-04 00:00:00	111	1	2
	Pereno Pendaerys	Minerva McGonagall	Bathsheda Babbling	Reverse Rhinopodoplasty	2021-05-03 00:00:00	112	1	2
	Patrek Vance	Herbert Beery	Poppy Pomfrey	Follicular Demiectomy	2021-05-03 00:00:00	112	1	2
	Pereno Pendaerys	Minerva McGonagall	Charity Burbage	Complete Walletectomy	2021-05-03 00:00:00	112	1	2

31. select phy.name as Physician from physician as phy

inner join undergoes as u

on phy.employeeid = u.physician

left join trained_in as ti

on (phy.employeeid = ti.physician)

AND (u.procedure = ti.treatment)

inner join `procedure` as pro

on u.procedure = pro.code

inner join patient as pat

on u.patient = pat.ssn

where ti.treatment IS NULL;

Physician
▶ Minerva McGonagall

32. select phy.name as Physician, pro.name as `Procedure`, u.date, pat.name as Patient

from physician as phy

inner join undergoes as u

on phy.employeeid = u.physician

left join trained_in as ti

on (phy.employeeid = ti.physician)

AND (u.procedure = ti.treatment)

inner join `procedure` as pro

on u.procedure = pro.code

inner join patient as pat

on u.patient = pat.ssn

where ti.treatment IS NULL;

Physician	Procedure	date	Patient
▶ Minerva McGonagall	Complete Walletectomy	2021-05-13 00:00:00	Pereno Pendaerys

33. select distinct phy.name as Physician, phy.position as Position
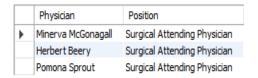
from physician as phy

inner join undergoes as u

on phy.employeeid = u.physician

left join trained_in as ti

on (phy.employeeid = ti.physician)

AND (u.procedure = ti.treatment)

inner join `procedure` as pro

on u.procedure = pro.code

inner join patient as pat

on u.patient = pat.ssn

where ti.treatment IS not NULL;

Physician	Position
▶ Minerva McGonagall	Surgical Attending Physician
Herbert Beery	Surgical Attending Physician
Pomona Sprout	Surgical Attending Physician

34. SELECT phy.name AS Physician, phy.position AS Position, proc.name AS `Procedure`,

u.date AS "Date of Procedure", ti.certificationexpires AS "Expiry Date of Certificate",

ptn.name AS Patient

FROM physician AS phy

INNER JOIN undergoes AS u

ON phy.employeeid = u.physician

INNER JOIN trained_in AS ti

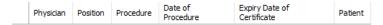ON phy.employeeid = ti.physician

AND (u.procedure = ti.treatment)

AND (u.date > ti.certificationexpires)

INNER JOIN `procedure` AS proc

ON u.procedure = proc.code

INNER JOIN patient AS ptn

ON u.patient = ptn.ssn;

Physician	Position	Procedure	Date of Procedure	Expiry Date of Certificate	Patient

35. select n.name from nurse as n

inner join on_call as oc

on n.employeeid = oc.nurse

join room as r

on oc.blockfloor = r.blockfloor

AND oc.blockcode = r.blockcode

WHERE r.roomnumber = 122;

name
Bathsheda Babbling
Charity Burbage

36. select ptn.name as Patient, phy.name as Physician

from patient as ptn

join prescribes as pre

on ptn.ssn = pre.patient

join physician as phy

on pre.physician = phy.employeeid

where ptn.pcp = pre.physician

Patient	Physician
Patrek Vance	Filius Flitwick

37. SELECT ptn.name AS Patient, phy.name AS "Primary Physician", proc.cost AS "Procedure Cost"

FROM patient AS ptn

INNER JOIN physician AS phy

ON ptn.pcp = phy.employeeid

INNER JOIN undergoes AS u

ON ptn.ssn = u.patient

INNER JOIN `procedure` AS proc

ON u.procedure = proc.code

WHERE proc.cost > 5000;

Patient	Primary Physician	Procedure Cost
Pereno Pendaerys	Minerva McGonagall	10000
Patrek Vance	Filius Flitwick	5600

38. SELECT ptn.name AS Patient, phy.name AS "Primary Physician", n.name AS Nurse

FROM patient AS ptn

INNER JOIN physician AS phy

ON ptn.pcp = phy.employeeid

INNER JOIN appointment AS app

ON ptn.ssn = app.patient

INNER JOIN nurse AS n

ON app.prepnurse = n.employeeid

WHERE n.registered = true

AND ptn.ssn IN

(SELECT patient FROM appointment GROUP BY patient HAVING COUNT(patient) > 1)

ORDER BY ptn.name, phy.name, n.name;

Patient	Primary Physician	Nurse
Patrek Vance	Filius Flitwick	Bathsheda Babbling
Patrek Vance	Filius Flitwick	Poppy Pomfrey
Paxter Redwyne	Neville Longbottom	Poppy Pomfrey
Paxter Redwyne	Neville Longbottom	Poppy Pomfrey
Pereno Pendaerys	Minerva McGonagall	Bathsheda Babbling

39. SELECT ptn.name AS Patient, phy.name AS "Primary Physician"

FROM patient AS ptn

INNER JOIN physician AS phy

ON ptn.pcp = phy.employeeid

WHERE ptn.pcp NOT IN

(SELECT head FROM department)

ORDER BY ptn.name, phy.name;

Patient	Primary Physician
Patrek Vance	Filius Flitwick
Patrice Hightower	Neville Longbottom
Paxter Redwyne	Neville Longbottom
Pereno Pendaerys	Minerva McGonagall