

# Phase II - Clinic Registration

CRN: 43511

## Group 10

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## Part A: Relational Schema

Mandatory DB system (may change depending on application):

logintable

loginid username email pass

### CREATE TABLE 'logintable' (

'loginid' int NOT NULL AUTO INCREMENT,

'username' varchar(45) DEFAULT NULL,

'email' varchar(45) DEFAULT NULL,

'pass' varchar(45) DEFAULT NULL,

PRIMARY KEY ('loginid'),

UNIQUE KEY 'loginid\_UNIQUE' ('loginid'),

UNIQUE KEY 'email UNIQUE' ('email')

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4 0900 ai ci;

#### patientreg

patientid	firstname	lastname	phonenumber	age	gender	dayOfBirth	username	email	pass	address
patientiu	msmame	lastilalite	phonenumber	age	gender	uayOlbiliii	uscilialite	Cilian	pass	audiess

## CREATE TABLE 'patientreg' (

'patientid' int NOT NULL AUTO INCREMENT,

'firstname' varchar(40) DEFAULT NULL,

'lastname' varchar(45) DEFAULT NULL,

'phonenumber' varchar(45) DEFAULT NULL,

'age' varchar(45) DEFAULT NULL,

'gender' varchar(45) DEFAULT NULL,

'dayOfBirth' varchar(45) DEFAULT NULL,

'username' varchar(45) DEFAULT NULL,

'email' varchar(45) DEFAULT NULL,

'pass' varchar(45) DEFAULT NULL,

'address' varchar(45) DEFAULT NULL,

PRIMARY KEY ('patientid'),

UNIQUE KEY 'patientid UNIQUE' ('patientid'),

UNIQUE KEY 'email UNIQUE' ('email')

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

doctorreg

doctorid	docfirstname	doclastname	docphonenumber	docage	docgender	docdayOfBirth	username	<u>email</u>	pass	docaddress
			1 *		~	1 ,	l	l ——	*	1

## CREATE TABLE 'doctorreg' (

- 'doctorid' int NOT NULL AUTO INCREMENT,
- 'docfirstname' varchar(45) DEFAULT NULL,
- 'doclastname' varchar(45) DEFAULT NULL,
- 'docphonenumber' varchar(45) DEFAULT NULL,
- 'docage' varchar(45) DEFAULT NULL,
- 'docgender' varchar(45) DEFAULT NULL,
- 'docdayOfBirth' varchar(45) DEFAULT NULL,
- 'username' varchar(45) DEFAULT NULL,
- 'email' varchar(45) DEFAULT NULL,
- 'pass' varchar(45) DEFAULT NULL,
- 'docaddress' varchar(45) DEFAULT NULL,

PRIMARY KEY ('doctorid'),

UNIQUE KEY 'doctorid UNIQUE' ('doctorid'),

UNIQUE KEY 'email UNIQUE' ('email')

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4 0900 ai ci;

#### appointments

apointmentid patientid	choosendate	time	doctorid
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## CREATE TABLE 'appointments' (

- 'appointmentid' int NOT NULL AUTO INCREMENT,
- 'patientid' int DEFAULT NULL,
- 'choosendate' varchar(45) DEFAULT NULL,
- 'time' varchar(45) DEFAULT NULL,
- 'doctorid' int DEFAULT NULL,

PRIMARY KEY ('appointmentid'),

UNIQUE KEY 'appointmentid\_UNIQUE' ('appointmentid'),

UNIQUE KEY 'patientid UNIQUE' ('patientid'),

UNIQUE KEY 'doctorid UNIQUE' ('doctorid')

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_0900\_ai\_ci;

prescription

prescriptionid	patientid	doctorid	prescriptionname	start	end
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## CREATE TABLE 'prescription' (

'prescriptionid' int NOT NULL AUTO INCREMENT,

'patientid' varchar(45) DEFAULT NULL,

'doctorid' varchar(45) DEFAULT NULL,

'prescriptionname' varchar(45) DEFAULT NULL,

'start' varchar(45) DEFAULT NULL,

'end' varchar(45) DEFAULT NULL,

PRIMARY KEY ('prescriptionid'),

UNIQUE KEY 'prescriptionid\_UNIQUE' ('prescriptionid'),

UNIQUE KEY 'patientid UNIQUE' ('patientid'),

UNIQUE KEY 'doctorid UNIQUE' ('doctorid')

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4 0900 ai ci;

## Part B: Sample Data

_				
	loginid	username	email	pass
	1	ур	example@gmail.com	here
	2	kk	example2@gmail.com	now
	3	as	example3@gmail.com	house
	4	pk	example4@gmail.com	blue
	5	rv	example5@gmail.com	red
	6	dm	example6@gmail.com	data
	7	doc1	example7@gmail.com	abc
	8	doc2	example8@gmail.com	bac
	9	doc3	example9@gmail.com	pos
	10	doc4	example 10@gmail.com	top
	11	doc5	example11@gmail.com	bright
•	12	doc6	example12@gmail.com	sun
	NULL	NULL	NULL	NULL

<											
Re	Result Grid   1										
	patientid	firstname	lastname	phonenumber	age	gender	dayOfBirth	username	email	pass	address
	1	yash	patel	1	20	male	somedate	ур	example@gmail.com	here	address
	2	kalapan	kannathsan	2	20	male	somedate2	kk	example2@gmail.com	now	address2
	3	ammar	salmawy	3	20	male	somedate3	as	example3@gmail.com	house	address3
	4	poojah	karunakaran	4	20	female	somedate4	pk	example4@gmail.com	blue	address4
	5	raza	navqi	5	20	female	somedate5	rn	example5@gmail.com	red	address5
•	6	data	mangament	6	20	other	somedate6	dm	example6@gmail.com	data	address6
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

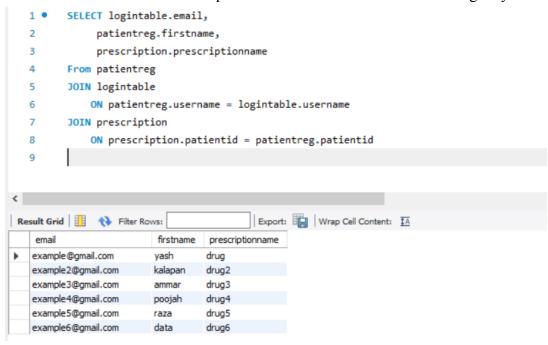
	doctorid	docfirstname	doclastname	docphonenumber	docage	docgender	docdayOfBirth	username	email	pass	docaddres
•	1	docfirst	doclast	7	50	other	somedate7	doc1	example7@gmail.com	abc	address7
	2	docfirst2	doclast2	8	51	other	somedate8	doc2	example8@gmail.com	bac	address8
	3	docfirst3	doclast3	9	52	other	somedate9	doc3	example9@gmail.com	pos	address9
	4	docfirst4	doclast4	10	53	other	somedate 10	doc4	example 10@gmail.com	top	address 10
	5	docfirst5	doclast5	11	54	other	somedate11	doc5	example11@gmail.com	bright	address11
	6	docfirst6	doclast6	12	55	other	somedate 12	doc6	example 12@gmail.com	sun	address12
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	HULL	HULL	NULL

_					_	
	prescriptionid	patientid	doctorid	prescriptionname	start	end
	1	1	1	drug	startdate	enddate
	2	2	2	drug2	startdate2	enddate2
	3	3	3	drug3	startdate3	enddate3
	4	4	4	drug4	startdate4	enddate4
	5	5	5	drug5	startdate5	enddate5
•	6	6	6	drug6	startdate6	enddate6
	NULL	HULL	HULL	NULL	NULL	NULL

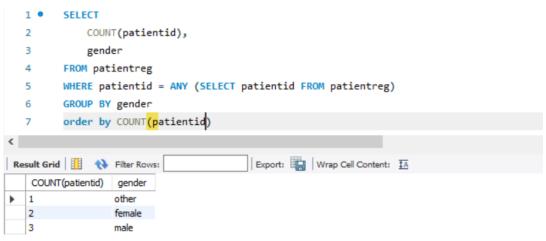
	appointmentid	patientid	choosendate	time	doctorid
	1	1	choosendate	time	1
	2	2	choosendate2	time2	2
	3	3	choosendate3	time3	3
	4	4	choosendate4	time4	4
	5	5	choosendate5	time5	5
•	6	6	choosendate6	time6	6
	NULL	NULL	NULL	NULL	NULL

## **Part C: Views**

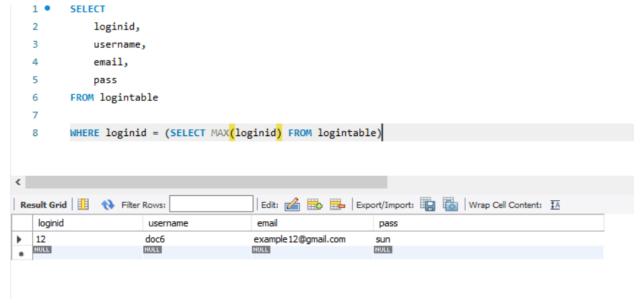
1. JOIN of at least three tables. Shows the email of a patient with their first name and the drug they have a prescription for.



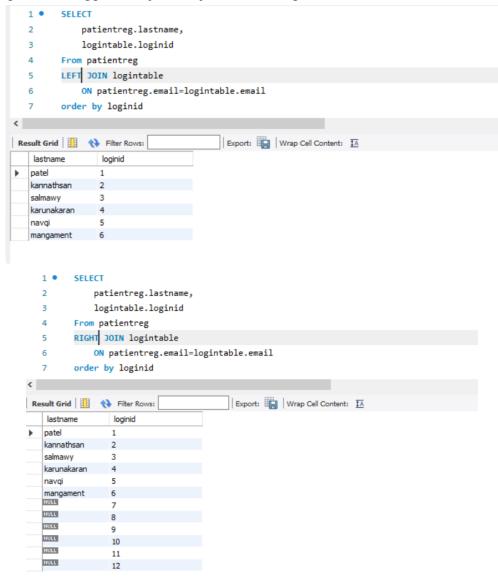
2. Uses nested queries with ANY and GROUP BY. Shows the different genders within the patient table and the total amount of each gender.



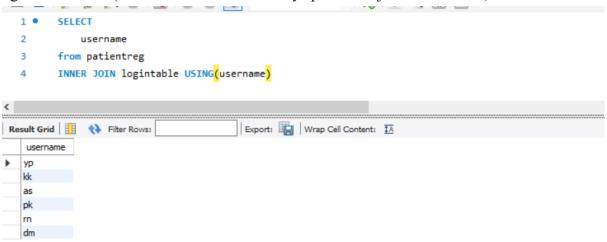
3. A correlated nested query. Shows the most recent user that has joined the system and their information.



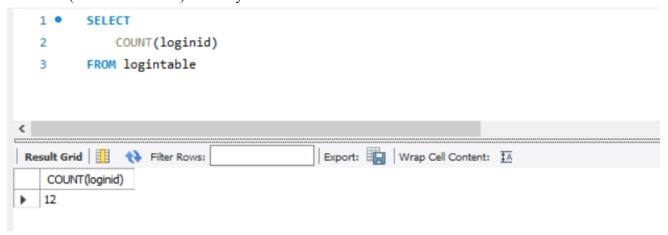
4. Uses a FULL JOIN (mysql doesn't support full join, so join left and right will be used to show that the concept works)



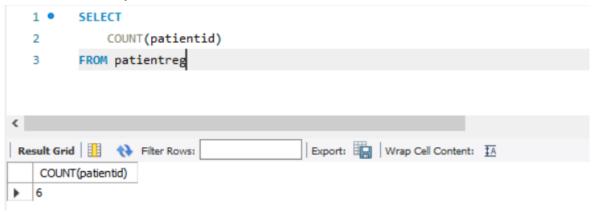
5. Nested query using INTERSECT (intersect doesn't work in mysql so inner join will be used).



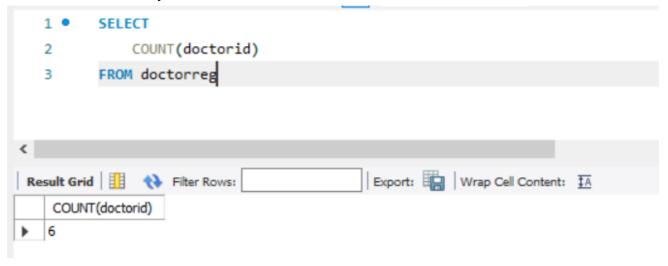
6. Total number of users (accounts created) in the system.



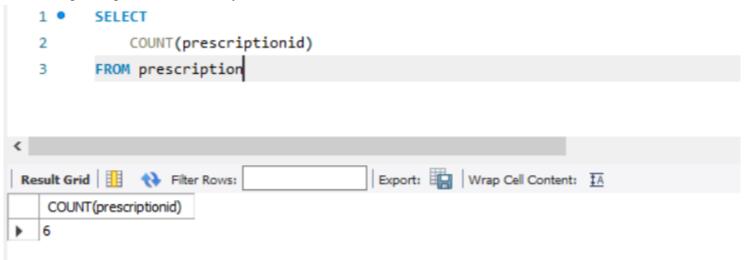
7. Total number of patients within the system.



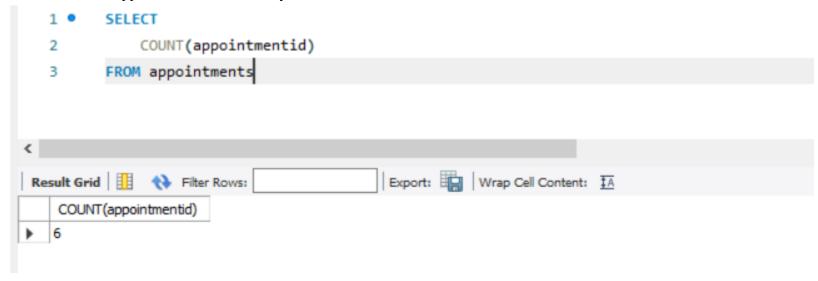
8. Total number of doctors within the system.



9. Total number of prescriptions within the system.



10. Total number of appointments within the system.



## Part D: E-R Diagram

