

DATABASE FOR MISR INTERNATIONAL CLINIC

- SO how we can create that database ?

```
CREATE DATABASE Misr_international_clinic ; .
```

- Second we need to add a table and while we creating it we will type column names like (ID,Fname,Lname,Salary,Address,Job) at the same time we must make sure that the employees will type their data and will not leave any empty space so will use command (**NOT NULL**) so this how we will create that table :

```
CREATE TABLE EMPLOYEEES(ID INT(255) NOT NULL ,Fname varchar(50) NOT NULL ,Lname varchar(50) NOT NULL ,Salary DECIMAL(18,5) NOT NULL ,Address varchar(255) NOT NULL ,Job char(50) NOT NULL) .
```

BUT➔ we can give the employees the choice to type their address or not by deleting NOT NULL while are creating that table but in my case, I will leave (**NOT NULL**).

- Next, we need to make a primary key so that's we are going to do :

```
ALTER TABLE table_name ADD PRIMARY KEY (Column_Name);
```

If we want to drop the primary key, we will use that command:

```
ALTER TABLE table_name DROP PRIMARY KEY;
```

But in my case, I will make the ID column the primary key

```
ALTER TABLE Employees ADD PRIMARY KEY (ID) ; .
```

ALTER➔ Modifies a tables or Databases

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	ID 🔑	int(255)			No	None			Change Drop More
<input type="checkbox"/>	2	Fname	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	3	Lname	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	4	Salary	decimal(18,2)			No	None			Change Drop More
<input type="checkbox"/>	5	Address	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	6	Job	char(50)	utf8mb4_general_ci		Yes	NULL			Change Drop More

- So the table will be like that when i add the data.

←T→		ID	Fname	Lname	Salary	Address	Job
<input type="checkbox"/>	Edit Copy Delete	10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor
<input type="checkbox"/>	Edit Copy Delete	12345	Ahmed	Mohamed	2500.00	nasr city	Nurse
<input type="checkbox"/>	Edit Copy Delete	16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor
<input type="checkbox"/>	Edit Copy Delete	18340	Khaled	Afify	6000.00	giza,haram street	Chief Financial Officer
<input type="checkbox"/>	Edit Copy Delete	18936	Kareem	Emad	2300.00	faisal,maryotia	Accountant
<input type="checkbox"/>	Edit Copy Delete	23456	wael	said	2000.00	faisal	Accountant
<input type="checkbox"/>	Edit Copy Delete	56010	Mohamed	Tarek	1900.00	giza,faisal	Clean Worker
<input type="checkbox"/>	Edit Copy Delete	67015	Ahmed	Yasser	8000.00	giza,haram	Dentist
<input type="checkbox"/>	Edit Copy Delete	80901	Mohamed	El Sayed	7000.00	giza,doki	Internal Doctor
<input type="checkbox"/>	Edit Copy Delete	87230	Ahmed	Ali	2300.00	giza,twabik	Accountant
<input type="checkbox"/>	Edit Copy Delete	87391	Omar	Alaa	4500.00	giza,faisal	Nurse
<input type="checkbox"/>	Edit Copy Delete	89010	Mohamed	Gareeb	11000.00	giaza,faisal	Anesthetization Doctor
<input type="checkbox"/>	Edit Copy Delete	89014	Omar	Attia	7500.00	giza,haram	Dentist
<input type="checkbox"/>	Edit Copy Delete	89015	Ahmed	Tarek	9000.00	giza,talbya	Internal Doctor
<input type="checkbox"/>	Edit Copy Delete	90130	wael	Ahmed	15000.00	giza,twabik	Surgeon
<input type="checkbox"/>	Edit Copy Delete	90701	Mohamed	Mahmoud	2350.00	giza,doky	Accountant
<input type="checkbox"/>	Edit Copy Delete	90901	Yossef	Magdy	2200.00	Giza,matbaa	Accountant
<input type="checkbox"/>	Edit Copy Delete	98090	Mohamed	Magdy	2000.00	giza,haram	Nurse
<input type="checkbox"/>	Edit Copy Delete	98120	Ali	Alaa	3000.00	giza,hadayk el ahram	Pharmacist
<input type="checkbox"/>	Edit Copy Delete	98201	Mohamed	khaled	8500.00	faisal	Surgeon

- What you can do if u want a to show a specific column?

We will use that command SELECT (DISTINCT):

SELECT DISTINCT column_name FROM table_name ;

In my case I want ID column so that is what I will type:

SELECT DISTINCT `ID` FROM `Employees` ;

OR➡ we can use that command

SELECT `Column1`,`Column2` FROM `Table_name`;

In my case I can use it with ID and Fname for example

```
SELECT `ID`, `Fname` FROM `Employee` ;
```

				ID	Fname
<input type="checkbox"/>	 Edit	 Copy	 Delete	10804	Abdalla
<input type="checkbox"/>	 Edit	 Copy	 Delete	12345	Ahmed
<input type="checkbox"/>	 Edit	 Copy	 Delete	16384	Omar
<input type="checkbox"/>	 Edit	 Copy	 Delete	18340	Khaled
<input type="checkbox"/>	 Edit	 Copy	 Delete	18936	Kareem
<input type="checkbox"/>	 Edit	 Copy	 Delete	23456	wael
<input type="checkbox"/>	 Edit	 Copy	 Delete	56010	Mohamed
<input type="checkbox"/>	 Edit	 Copy	 Delete	67015	Ahmed
<input type="checkbox"/>	 Edit	 Copy	 Delete	80901	Mohamed
<input type="checkbox"/>	 Edit	 Copy	 Delete	87230	Ahmed
<input type="checkbox"/>	 Edit	 Copy	 Delete	87391	Omar
<input type="checkbox"/>	 Edit	 Copy	 Delete	89010	Mohamed
<input type="checkbox"/>	 Edit	 Copy	 Delete	89014	Omar
<input type="checkbox"/>	 Edit	 Copy	 Delete	89015	Ahmed
<input type="checkbox"/>	 Edit	 Copy	 Delete	90130	wael
<input type="checkbox"/>	 Edit	 Copy	 Delete	90701	Mohamed
<input type="checkbox"/>	 Edit	 Copy	 Delete	90901	Yossef
<input type="checkbox"/>	 Edit	 Copy	 Delete	98090	Mohamed
<input type="checkbox"/>	 Edit	 Copy	 Delete	98120	Ali
<input type="checkbox"/>	 Edit	 Copy	 Delete	98201	Mohamed




- What we can do if we want to insert someone's information into the database?

We will use that command (INSERT INTO):

```
INSERT INTO `employees` (`Column_Name1`, `Column_Name2`, `Column_Name3`, `Column_Name4` `Column_Name5`, `Column_Name6`)
VALUES ('Data1', 'Data1 ', 'Data2 ', 'Data3 ', 'Data4 ', 'Data5 ');
```

So in my case I want to add someone, his Fname is wael and his Lname is said and His ID is 23456 and he works as a accountant and his salary is 1500 EGP and he lives in faisal so the command will be like this:

```
INSERT INTO `employees` (`ID`, `Fname`, `Lname`, `Salary`, `Address`, `Job`)
VALUES ('89104', 'wael', 'ahmed', '1500', 'giza', 'Accountant');
```

<input type="checkbox"/>	 Edit	 Copy	 Delete	89104	wael	ahmed	1500.00	giza	Accountant
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- If we want to drop the table “Employees” we will use the command **DROP** so the command will be:
DROP TABLE Table_name ;
But in my case, I will not delete it but if I want to, the command will be like that:

```
DROP TABLE Employees ;
```

- We can also use ALTER + DROP in one command to delete a column like that:

```
ALTER TABLE table_name DROP COLUMN column_name;
```

- For example I have 25 employees 11 of them have a salary ≤ 3000 EGP what can I do if I want to know them?

In my case I can use where statement, For example

```
SELECT `ID`, `Fname`, `Salary` FROM `Employees` WHERE `Salary` <= 3000 ;
```

				ID	Fname	Salary
<input type="checkbox"/>	Edit	Copy	Delete	12345	Ahmed	2500.00
<input type="checkbox"/>	Edit	Copy	Delete	18936	Kareem	2300.00
<input type="checkbox"/>	Edit	Copy	Delete	23456	wael	2000.00
<input type="checkbox"/>	Edit	Copy	Delete	56010	Mohamed	1900.00
<input type="checkbox"/>	Edit	Copy	Delete	80104	wael	1500.00
<input type="checkbox"/>	Edit	Copy	Delete	87230	Ahmed	2300.00
<input type="checkbox"/>	Edit	Copy	Delete	89104	wael	1500.00
<input type="checkbox"/>	Edit	Copy	Delete	90701	Mohamed	2350.00
<input type="checkbox"/>	Edit	Copy	Delete	90901	Yossef	2200.00
<input type="checkbox"/>	Edit	Copy	Delete	98090	Mohamed	2000.00
<input type="checkbox"/>	Edit	Copy	Delete	98120	Ali	3000.00

- Now I want to add a new column (Age) , we can use **ALTER** like that
ALTER TABLE `Employees` ADD `Age` INT(255) NOT NULL AFTER `Job`;

				ID	Fname	Lname	Salary	Address	Job	Age
<input type="checkbox"/>	Edit	Copy	Delete	10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor	40
<input type="checkbox"/>	Edit	Copy	Delete	12345	Ahmed	Mohamed	2500.00	nasr city	Nurse	31
<input type="checkbox"/>	Edit	Copy	Delete	16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor	46
<input type="checkbox"/>	Edit	Copy	Delete	18340	Khaled	Afify	6000.00	giza,haram street	Chief Financial Officer	49
<input type="checkbox"/>	Edit	Copy	Delete	18936	Kareem	Emad	2300.00	faisal,maryotia	Accountant	30
<input type="checkbox"/>	Edit	Copy	Delete	23456	wael	said	2000.00	faisal	Accountant	28
<input type="checkbox"/>	Edit	Copy	Delete	56010	Mohamed	Tarek	1900.00	giza,faisal	Clean Worker	36
<input type="checkbox"/>	Edit	Copy	Delete	67015	Ahmed	Yasser	8000.00	giza,haram	Dentist	37
<input type="checkbox"/>	Edit	Copy	Delete	80104	wael	ahmed	1500.00	giza	Accountant	24
<input type="checkbox"/>	Edit	Copy	Delete	80901	Mohamed	El Sayed	7000.00	giza,doki	Internal Doctor	53
<input type="checkbox"/>	Edit	Copy	Delete	87230	Ahmed	Ali	2300.00	giza,twabik	Accountant	33
<input type="checkbox"/>	Edit	Copy	Delete	87391	Omar	Alaa	4500.00	giza,faisal	Nurse	29
<input type="checkbox"/>	Edit	Copy	Delete	89010	Mohamed	Gareeb	11000.00	giza,faisal	Anesthetization Doctor	50
<input type="checkbox"/>	Edit	Copy	Delete	89014	Omar	Attia	7500.00	giza,haram	Dentist	49
<input type="checkbox"/>	Edit	Copy	Delete	89015	Ahmed	Tarek	9000.00	giza,talbya	Internal Doctor	57
<input type="checkbox"/>	Edit	Copy	Delete	89104	wael	ahmed	1500.00	giza	Accountant	50
<input type="checkbox"/>	Edit	Copy	Delete	90130	wael	Ahmed	15000.00	giza,twabik	Surgeon	51
<input type="checkbox"/>	Edit	Copy	Delete	90701	Mohamed	Mahmoud	2350.00	giza,doky	Accountant	30
<input type="checkbox"/>	Edit	Copy	Delete	90901	Yossef	Magdy	2200.00	Giza,matbaa	Accountant	28
<input type="checkbox"/>	Edit	Copy	Delete	98090	Mohamed	Magdy	2000.00	giza,haram	Nurse	26
<input type="checkbox"/>	Edit	Copy	Delete	98120	Ali	Alaa	3000.00	giza,hadayk el ahram	Pharmacist	30
<input type="checkbox"/>	Edit	Copy	Delete	98201	Mohamed	khaled	8500.00	faisal	Surgeon	37

- We can use **And** and **OR** operators to combine multiple conditions , I can use those operators like that

SELECT*FROM table_name WHERE Column_name condition AND/OR Condition ;

SELECT*FROM `employees` WHERE `Salary`>5000 AND age > 25 ;



































































				ID	Fname	Lname	Salary	Address	Job	Age
<input type="checkbox"/>				10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor	40
<input type="checkbox"/>				16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor	46
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<input type="checkbox"/>				89010	Mohamed	Gareeb	11000.00	giaza,faisal	Anesthetization Doctor	50
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<input type="checkbox"/>				89015	Ahmed	Tarek	9000.00	giza,talbya	Internal Doctor	57
<input type="checkbox"/>				90130	wael	Ahmed	15000.00	giza,twabik	Surgeon	51
<input type="checkbox"/>				98201	Mohamed	khaled	8500.00	faisal	Surgeon	37

- When we want to arrange in an ascending or descending order we can use

ORDER BY(ASC/DESC) command like that

SELECT*FROM /SELCET column1 , column2 FROM table_name ORDER BR column1/column2 ASC/DESC ;

SELECT*FROM employees ORDER BY SALARY ASC ;

[-] T [-]				ID	Fname	Lname	Salary	Address	Job	Age
<input type="checkbox"/>				89104	wael	ahmed	1500.00	giza	Accountant	50
<input type="checkbox"/>				80104	wael	ahmed	1500.00	giza	Accountant	24
<input type="checkbox"/>				56010	Mohamed	Tarek	1900.00	giza,faisal	Clean Worker	36
<input type="checkbox"/>				98090	Mohamed	Magdy	2000.00	giza,haram	Nurse	26
<input type="checkbox"/>				23456	wael	said	2000.00	faisal	Accountant	28
<input type="checkbox"/>				90901	Yossef	Magdy	2200.00	Giza,matbaa	Accountant	28
<input type="checkbox"/>				87230	Ahmed	Ali	2300.00	giza,twabik	Accountant	33
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<input type="checkbox"/>				89010	Mohamed	Gareeb	11000.00	giaza,faisal	Anesthetization Doctor	50
<input type="checkbox"/>				90130	wael	Ahmed	15000.00	giza,twabik	Surgeon	51

- If I want to know the employees that their names start with a specific letter or I want to know who is the employee his name ends with a specific letter or I want to find a specific value in any position , in that case we will use **LIKE CLAUSE + (% , _)** like that

⇒ 'xx%' => find any values that start with xx

⇒ '%xx%' => find any values that have xx in any position

⇒ '_xx%' => find any values that have xx in the second and third position

⇒ 'x_%_%' => find any values that start with x and at least 3 characters in length




⇒ '%x' => find any values that ends with x

⇒ '_x%y' => find any values that have x in second position and end with y

⇒ 'x____y' => find any values in a five characters that starts with x and end with y

For example we can use that command

```
SELECT*FROM employees where Fname LIKE 'm%';
```


<div>←T→</div>				ID	Fname	Lname	Salary	Address	Job	Age
<input type="checkbox"/>	 Edit	 Copy	 Delete	56010	Mohamed	Tarek	1900.00	giza,faisal	Clean Worker	36
<input type="checkbox"/>	 Edit	 Copy	 Delete	80901	Mohamed	El Sayed	7000.00	giza,doki	Internal Doctor	53
<input type="checkbox"/>	 Edit	 Copy	 Delete	89010	Mohamed	Gareeb	11000.00	giaza,faisal	Anesthetization Doctor	50
<input type="checkbox"/>	 Edit	 Copy	 Delete	90701	Mohamed	Mahmoud	2350.00	giza,doky	Accountant	30
<input type="checkbox"/>	 Edit	 Copy	 Delete	98090	Mohamed	Magdy	2000.00	giza,haram	Nurse	26
<input type="checkbox"/>	 Edit	 Copy	 Delete	98201	Mohamed	khaled	8500.00	faisal	Surgeon	37

- If I want the first (10 or 5 or any number) rows I can use **LIMIT CLAUSE** like that

SELECT*FROM employees LIMIT 10;

←T→				ID	Fname	Lname	Salary	Address	Job	Age
<input type="checkbox"/>	 Edit	 Copy	 Delete	10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor	40
<input type="checkbox"/>	 Edit	 Copy	 Delete	12345	Ahmed	Mohamed	2500.00	nasr city	Nurse	31
<input type="checkbox"/>	 Edit	 Copy	 Delete	16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor	46
<input type="checkbox"/>	 Edit	 Copy	 Delete	18340	Khaled	Afify	6000.00	giza,haram street	Chief Financial Officer	49
<input type="checkbox"/>	 Edit	 Copy	 Delete	18936	Kareem	Emad	2300.00	faisal,maryotia	Accountant	30
<input type="checkbox"/>	 Edit	 Copy	 Delete	23456	wael	said	2000.00	faisal	Accountant	28
<input type="checkbox"/>	 Edit	 Copy	 Delete	56010	Mohamed	Tarek	1900.00	giza,faisal	Clean Worker	36
<input type="checkbox"/>	 Edit	 Copy	 Delete	67015	Ahmed	Yasser	8000.00	giza,haram	Dentist	37
<input type="checkbox"/>	 Edit	 Copy	 Delete	80104	wael	ahmed	1500.00	giza	Accountant	24
<input type="checkbox"/>	 Edit	 Copy	 Delete	80901	Mohamed	El Sayed	7000.00	giza,doki	Internal Doctor	53

He is showing me the first 10 rows

- Now I will create a new table and link it with the first one by using (FORIGEN KEY) like that

CREATE TABLE patients (Patient_ID INT NOT NULL , Doctor_ID INT NOT NULL , PRIMARY KEY(Patient_ID) , FOREIGN KEY(Doctor_ID) REFERENCES employees(ID) , Doctor_examination_days varchar(255));































#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 Patient_ID	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 Doctor_ID	int(11)			No	None			Change Drop More
<input type="checkbox"/>	3 Doctor_examination_days	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More

So thee will be like that

		Patient_ID	Doctor_ID	Doctor_examination_days
<input type="checkbox"/>	Edit Copy Delete	198	90130	Friday
<input type="checkbox"/>	Edit Copy Delete	234	67015	Monday
<input type="checkbox"/>	Edit Copy Delete	235	90130	Wednesday
<input type="checkbox"/>	Edit Copy Delete	398	98201	Tuesday
<input type="checkbox"/>	Edit Copy Delete	456	98201	Friday
<input type="checkbox"/>	Edit Copy Delete	601	89015	Sunday
<input type="checkbox"/>	Edit Copy Delete	657	10804	Sunday
<input type="checkbox"/>	Edit Copy Delete	671	16384	Monday
<input type="checkbox"/>	Edit Copy Delete	687	80901	Wednesday
<input type="checkbox"/>	Edit Copy Delete	763	23456	Sunday
<input type="checkbox"/>	Edit Copy Delete	785	67015	Thursday
<input type="checkbox"/>	Edit Copy Delete	789	10804	Monday
<input type="checkbox"/>	Edit Copy Delete	809	16384	Wednesday
<input type="checkbox"/>	Edit Copy Delete	863	10804	Wednesday
<input type="checkbox"/>	Edit Copy Delete	875	98201	Monday
<input type="checkbox"/>	Edit Copy Delete	903	16384	Friday
<input type="checkbox"/>	Edit Copy Delete	906	89015	Saturday
<input type="checkbox"/>	Edit Copy Delete	907	89014	Thursday
<input type="checkbox"/>	Edit Copy Delete	937	89010	Sunday
<input type="checkbox"/>	Edit Copy Delete	984	67015	Tuesday

- If we want to know the jobs in the clinic:

```
SELECT DISTINCT Job FROM employees;
```

	Job
<input type="checkbox"/>  Edit  Copy  Delete	Neurosurgeon Doctor
<input type="checkbox"/>  Edit  Copy  Delete	Nurse
<input type="checkbox"/>  Edit  Copy  Delete	Anesthetization Doctor
<input type="checkbox"/>  Edit  Copy  Delete	Chief Financial Officer
<input type="checkbox"/>  Edit  Copy  Delete	Accountant
<input type="checkbox"/>  Edit  Copy  Delete	Clean Worker
<input type="checkbox"/>  Edit  Copy  Delete	Dentist
<input type="checkbox"/>  Edit  Copy  Delete	Internal Doctor
<input type="checkbox"/>  Edit  Copy  Delete	Surgeon
<input type="checkbox"/>  Edit  Copy  Delete	Pharmacist

- If we want to count no of doctors in every day :

```
SELECT COUNT (Doctor_ID),Doctor_examination_days FROM patients  
GROUP BY Doctor_examination_days ;
```

COUNT(Doctor_ID)	Doctor_examination_days
3	Friday
4	Monday
1	Saturday
4	Sunday
2	Thursday
2	Tuesday
4	Wednesday

- If we want to add a date column on table patients:-

ALTRE TABLE patients ADD date_examination date;

Browse after inserting

Patient_ID	Doctor_ID	Doctor_examination_days	date_examination
198	90130	Friday	2022-12-09
234	67015	Monday	2022-12-05
235	90130	Wednesday	2022-12-07
398	98201	Tuesday	2022-12-06
456	98201	Friday	2022-12-09
601	89015	Sunday	2022-12-04
657	10804	Sunday	2022-12-04
671	16384	Monday	2022-12-05
687	80901	Wednesday	2022-12-07
763	23456	Sunday	2022-12-04
785	67015	Thursday	2022-12-08
789	10804	Monday	2022-12-05
809	16384	Wednesday	2022-12-07
863	10804	Wednesday	2022-12-07
875	98201	Monday	2022-12-05
903	16384	Friday	2022-12-09
906	89015	Saturday	2022-12-03
907	89014	Thursday	2022-12-08
937	89010	Sunday	2022-12-04
984	67015	Tuesday	2022-12-06

- If we want browse the two tables:-

```
SELECT * FROM employees, patients WHERE
employees.ID=patients.Doctor_ID GROUP BY patient_ID;
```

ID	Fname	Lname	Salary	Address	Job	Age	Patient_ID	Doctor_ID	Doctor_examination_days	date_examination
90130	wael	Ahmed	15000.00	giza,twabik	Surgeon	51	198	90130	Friday	2022-12-09
67015	Ahmed	Yasser	8000.00	giza,haram	Dentist	37	234	67015	Monday	2022-12-05
90130	wael	Ahmed	15000.00	giza,twabik	Surgeon	51	235	90130	Wednesday	2022-12-07
98201	Mohamed	khaled	8500.00	faisal	Surgeon	37	398	98201	Tuesday	2022-12-06
98201	Mohamed	khaled	8500.00	faisal	Surgeon	37	456	98201	Friday	2022-12-09
89015	Ahmed	Tarek	9000.00	giza,talbya	Internal Doctor	57	801	89015	Sunday	2022-12-04
10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor	40	657	10804	Sunday	2022-12-04
16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor	46	671	16384	Monday	2022-12-05
80901	Mohamed	El Sayed	7000.00	giza,doki	Internal Doctor	53	687	80901	Wednesday	2022-12-07
23456	wael	said	2000.00	faisal	Accountant	28	763	23456	Sunday	2022-12-04
67015	Ahmed	Yasser	8000.00	giza,haram	Dentist	37	785	67015	Thursday	2022-12-08
10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor	40	789	10804	Monday	2022-12-05
16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor	46	809	16384	Wednesday	2022-12-07
10804	Abdalla	El masry	10000.00	faisal,haram	Neurosurgeon Doctor	40	863	10804	Wednesday	2022-12-07
98201	Mohamed	khaled	8500.00	faisal	Surgeon	37	875	98201	Monday	2022-12-05
16384	Omar	Tarek	10000.00	giza,faisal	Anesthetization Doctor	46	903	16384	Friday	2022-12-09
89015	Ahmed	Tarek	9000.00	giza,talbya	Internal Doctor	57	906	89015	Saturday	2022-12-03
89014	Omar	Attia	7500.00	giza,haram	Dentist	49	907	89014	Thursday	2022-12-08
89010	Mohamed	Gareeb	11000.00	giiza,faisal	Anesthetization Doctor	50	937	89010	Sunday	2022-12-04
67015	Ahmed	Yasser	8000.00	giza,haram	Dentist	37	984	67015	Tuesday	2022-12-06

- Aliases:-

Table employee: e

Table patients: p

Fname column: name_dr

- Inner join:-

```
SELECT p.patient_ID, e.Fname name_dr from patients p INNER JOIN  
employees e on e.id= p.Doctor_ID;
```

patient_ID	name_dr
657	Abdalla
789	Abdalla
863	Abdalla
671	Omar
809	Omar
903	Omar
763	wael
234	Ahmed
785	Ahmed
984	Ahmed
687	Mohamed
937	Mohamed
907	Omar
601	Ahmed
906	Ahmed
198	wael
235	wael
398	Mohamed
456	Mohamed
875	Mohamed

- Right join:-

```
SELECT p.patient_ID,e.Fname name_dr FROM patients p RIGHT JOIN
employees e ON p.Doctor_ID=e.ID;
```

patient_ID	name_dr
657	Abdalla
789	Abdalla
863	Abdalla
671	Omar
809	Omar
903	Omar
763	wael
234	Ahmed
785	Ahmed
984	Ahmed
687	Mohamed
937	Mohamed
907	Omar
601	Ahmed
906	Ahmed
198	wael
235	wael
398	Mohamed
456	Mohamed
875	Mohamed

patient_ID	name_dr
398	Mohamed
456	Mohamed
875	Mohamed

- Left join:-

```
SELECT p.patient_ID,e.Fname name_dr FROM patients p LEFT JOIN
employees e ON p.Doctor_ID=e.ID;
```

patient_ID	name_dr
657	Abdalla
789	Abdalla
863	Abdalla
671	Omar
809	Omar
903	Omar
763	wael
234	Ahmed
785	Ahmed
984	Ahmed
687	Mohamed
937	Mohamed
907	Omar
601	Ahmed
906	Ahmed
198	wael
235	wael
398	Mohamed
456	Mohamed
875	Mohamed

- Union:-

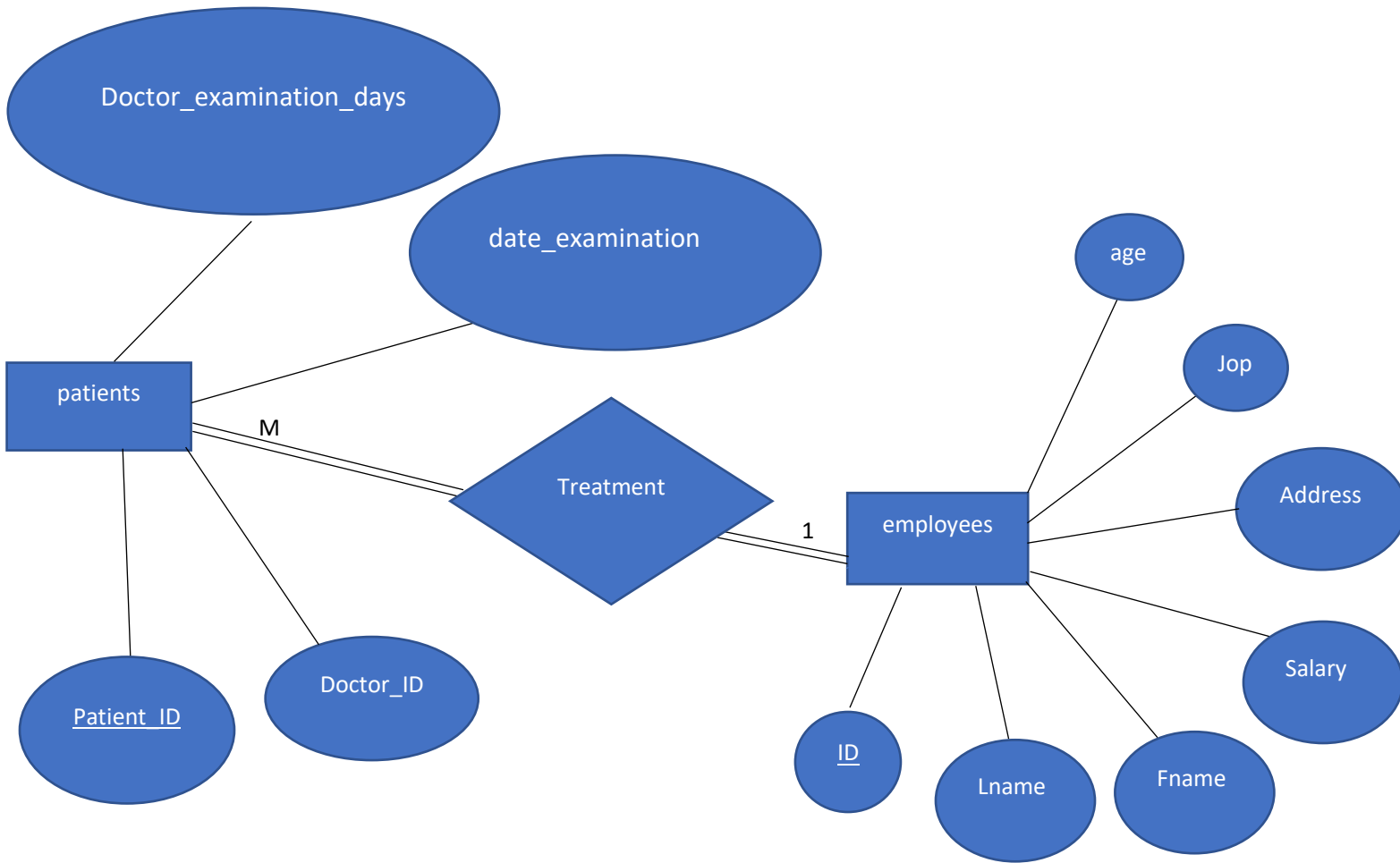
We will use union to get all id in the database

SELECT Patient_ID ALL_id FROM patients UNION

SELECT ID FROM employees;

ALL_id		ALL_id
657		
789		
863		
671		
809		
903		80901
763		87230
234		87391
785		89010
984		89014
687		89015
937		89104
907		90130
601		90701
908		90901
198		98090
235		98120
398		98201
456		
875		
10804		
12345		
16384		
18340		
18938		
23456		
56010		
67015		
80104		

ERD



RDD

misr_international_clinic patients	
🔑 Patient_ID : int(11)	
# Doctor_ID : int(11)	
📄 Doctor_examination_days : varchar(255)	
📅 date_examination : date	

misr_international_clinic employees	
🔑 ID : int(255)	
📄 Fname : varchar(50)	
📄 Lname : varchar(50)	
# Salary : decimal(18,2)	
📄 Address : varchar(255)	
📄 Job : char(50)	
# Age : int(255)	

