SQL- STRUCTURED QUERIED LANGUAGE

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What is sql

~~SQL : structure query language~~

- Structured Query Language (SQL) is a powerful and standardized programming language designed for managing and manipulating relational databases. It serves as a bridge between the user and the database, allowing users to define, retrieve, update, and manipulate data. SQL operates on the principle of a relational database, organizing information into tables comprised of rows and columns.

- It exist seqeries against data base
- Sql can insert ,update , delete from data base..
- Sql can create stored procedure data base

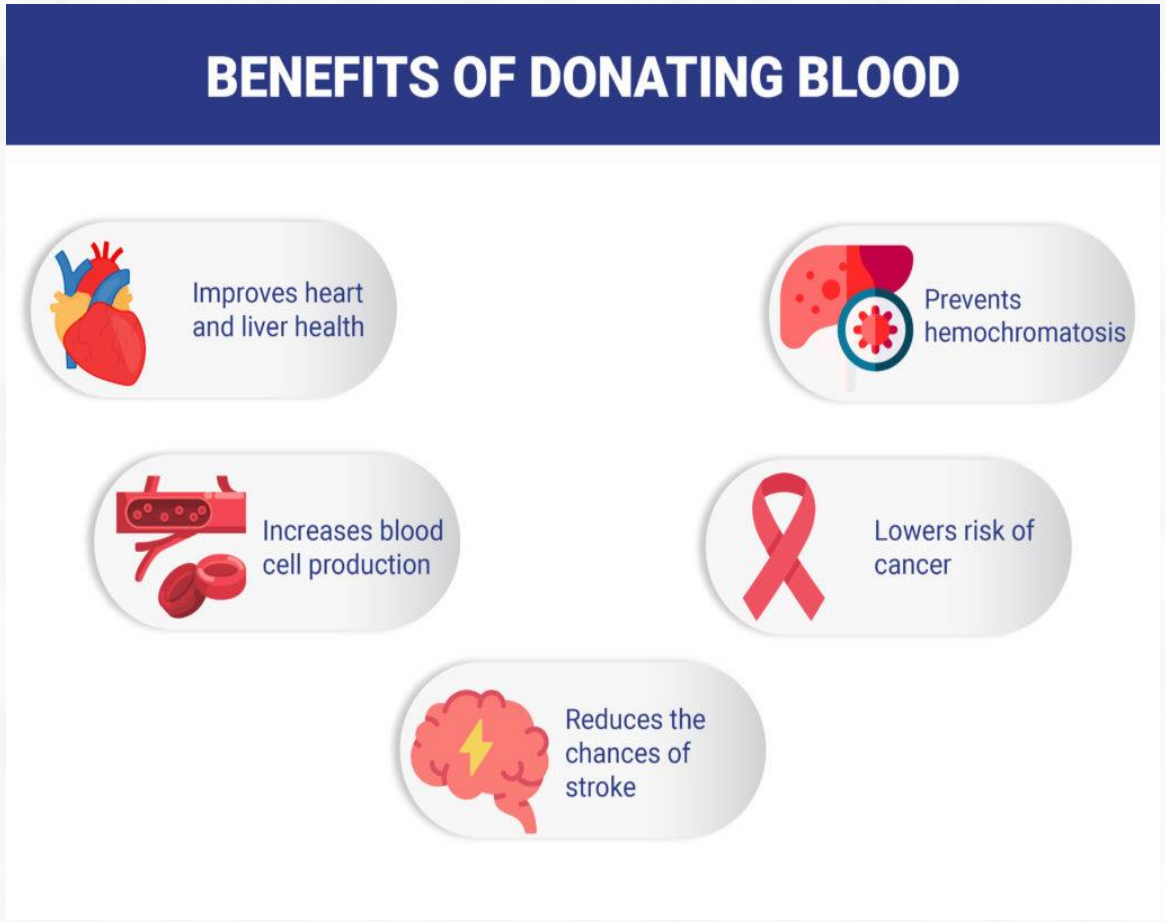
PROJECT TITLE :

BLOOD_DONATION_MANAGEMENT

Blood Donor Management System is an associate work that brings voluntary blood donors and those in need of blood to an emergency. The purpose of this paper is to develop a mobile application that will help the seekers to identify the blood donors near their location.

Welcome to my presentation on BLOOD DONATION Database Management System. We will explore SQL and the crucial role of database management.

BENEFITS OF BLOOD DONATION

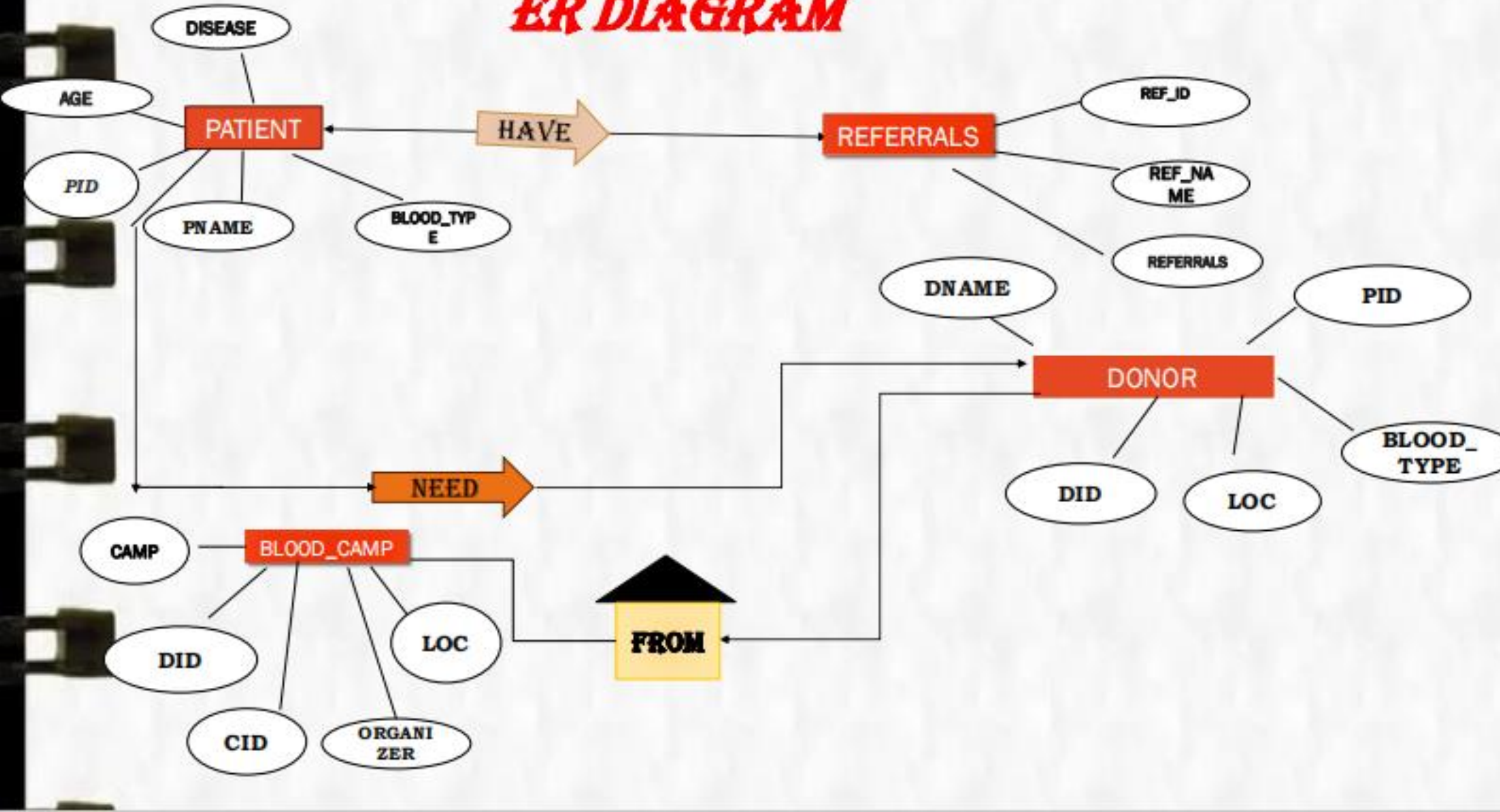


Medical researchers also need donated blood in order to develop and test new treatments for many medical conditions – such as blood clots, heart attack, stroke and cancer.

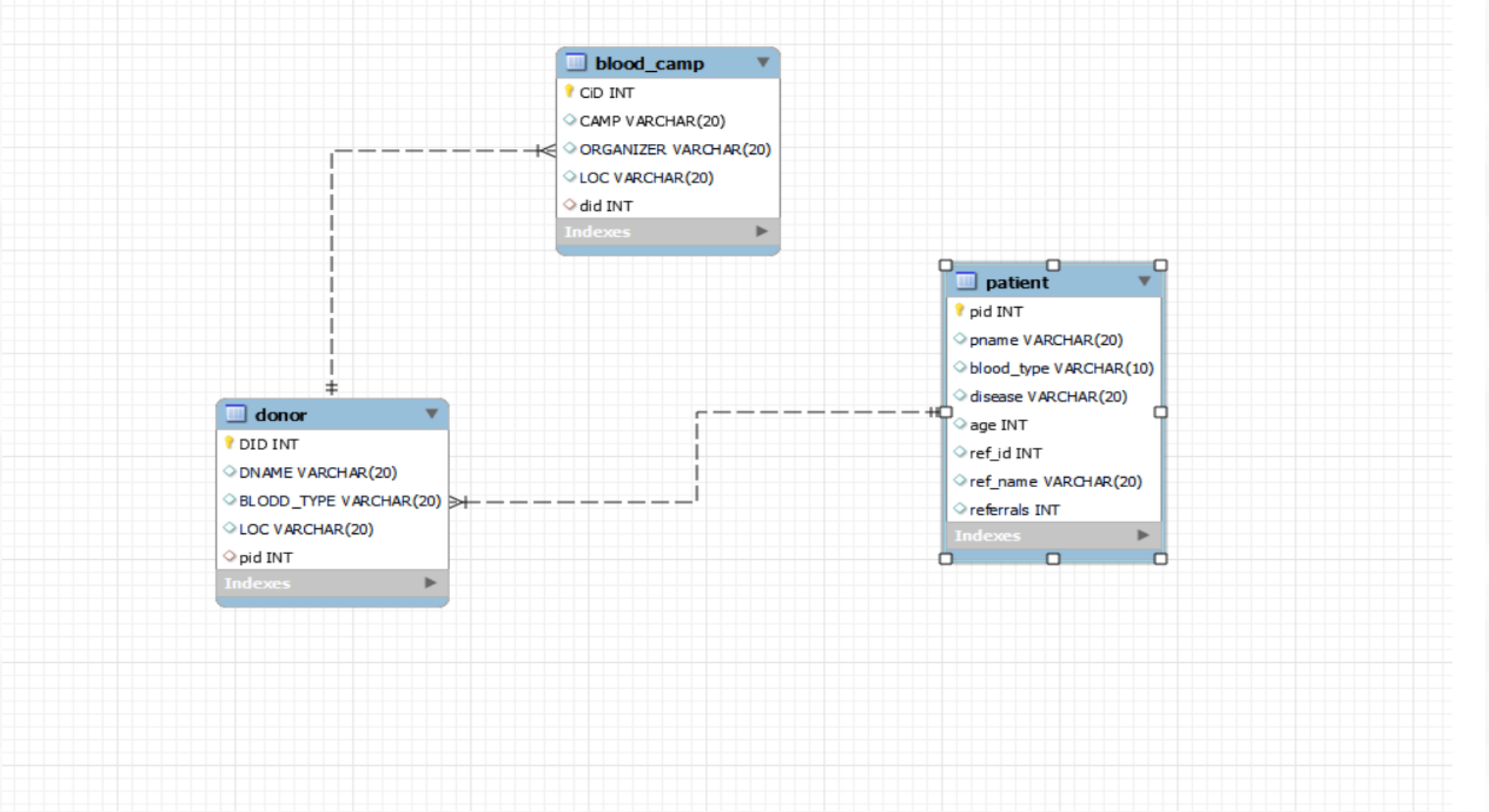
8 Health Benefits of Donating Blood

- May reveal health problems. ...
- Prevents Hemochromatosis. ...
- Blood donation is beneficial in lowering excess iron in the body, which can reduce the risk of a heart attack. ...
- May reduce the risk of developing cancer. ...
- Stimulates blood cell production. ...
- Maintains healthy liver. ...
- Weight loss.

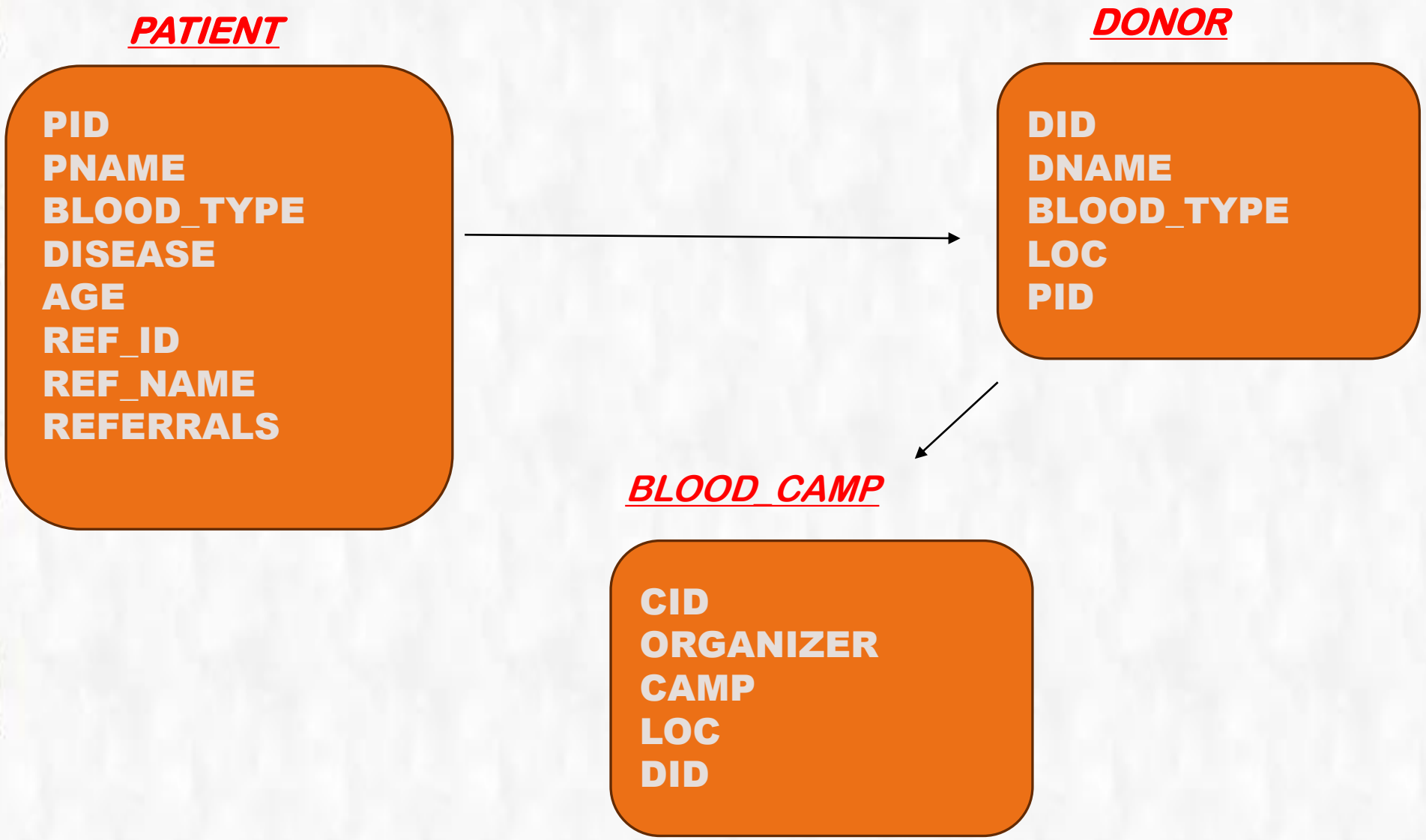
ER DIAGRAM


DISEASE
AGE
PATIENT
HAVE
REFERRALS
REF_ID
REF_NAME
PID
PNAME
BLOOD_TYPE
REFERRALS
DNAME
PID
DONOR
NEED
DID
LOC
BLOOD_TYPE
CAMP
BLOOD_CAMP
FROM
DID
LOC
CID
ORGANIZER

ER DIAGRAM


blood_camp
CiD INT
CAMP VARCHAR(20)
ORGANIZER VARCHAR(20)
LOC VARCHAR(20)
did INT
Indexes
patient
pid INT
pname VARCHAR(20)
blood_type VARCHAR(10)
disease VARCHAR(20)
age INT
ref_id INT
ref_name VARCHAR(20)
referrals INT
Indexes
donor
DID INT
DNAME VARCHAR(20)
BLODD_TYPE VARCHAR(20)
LOC VARCHAR(20)
pid INT
Indexes

SCHEMAS


PATIENT
PID
PNAME
BLOOD_TYPE
DISEASE
AGE
REF_ID
REF_NAME
REFERRALS
DONOR
DID
DNAME
BLOOD_TYPE
LOC
PID
BLOOD_CAMP
CID
ORGANIZER
CAMP
LOC
DID

QUERIES

1. WAQTD all the details of the patient?

```
select * from patient;
```

pid	pname	blood_type	disease	age	ref_id	ref_name	referrals
1	victor	b+ve	cancer	32	7369	bala	7902
2	parker	b+ve	cancer	30	7499	mugun	7698
3	smith	a+ve	cholera	28	7521	minu	7698
4	john	b+ve	jaundice	35	7566	suba	7839
5	mike	o+ve	chickenpx	29	7654	hari	7698
6	robin	a+ve	small pox	33	7698	vivek	7839
7	leo	ab+ve	cholera	31	7782	velu	7839
8	mugen	o+ve	cancer	25	7788	priya	7566
9	antony	a+ve	tuberculosis	33	7839	adams	7698
10	joseph	o+ve	jaundice	40	7844	jp	7788
11	dass	ab+ve	malaria	36	7876	vino	7698
12	lawrence	a+ve	diptheria	30	7900	mani	7566
13	amar	o+ve	malaria	22	7902	ragu	7782
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

PATIENT 1

2. WQTD THE NAMES OF THE PATIENT WHO ARE IN B+VE?

```
select pname from patient where blood_type='b+ve';
```

pname	BLOOD_TYPE
victor	b+ve
parker	b+ve
john	b+ve

3. WAQTD THE PATIENT id, NAMES, BLOOD GROUP, AGE, REFERRAL ID, REFFERAL NAME, BLOOD ID , DISEASE BUT EXCEPT AFFECTED BY CANCER?

```
select pid,   pname, BLOOD_TYPE, DISEASE,  Ref_id, ref_name, REFERRALS from patient where DISEASE not in ('cancer');
```

pid	pname	BLOOD_TYPE	DISEASE	Ref_id	ref_name	referrals
3	smith	a+ve	cholera	7521	minu	7698
4	john	b+ve	jaundice	7566	suba	7839
5	mike	o+ve	chickenpx	7654	hari	7698
6	robin	a+ve	small pox	7698	vivek	7839
7	leo	ab+ve	cholera	7782	velu	7839
9	antony	a+ve	tuberculosis	7839	adams	7698
10	joseph	o+ve	jaundice	7844	jp	7788
11	dass	ab+ve	malaria	7876	vino	7698
12	lawrence	a+ve	diptheria	7900	mani	7566
13	amar	o+ve	malaria	7902	ragu	7782
NULL	NULL	NULL	NULL	NULL	NULL	NULL

4. WAQATD PATIENT NAMES, AGE, DISEASE IF PATIENT ARE IN AGE RANGE 35 TO 40?

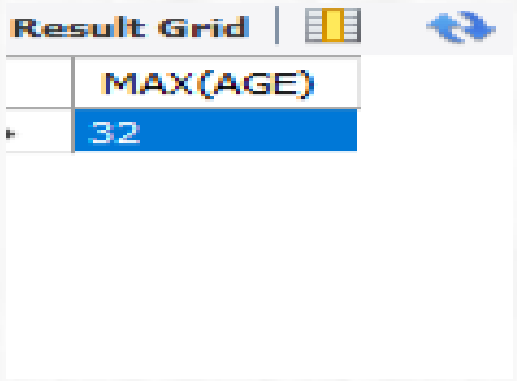
```
SELECT PNAME, AGE, DISEASE FROM PATIENT WHERE AGE BETWEEN 35 AND 40;
```

Result Grid | Filter Rows:

PNAME	AGE	DISEASE
john	35	jaundice
joseph	40	jaundice
dass	36	malaria

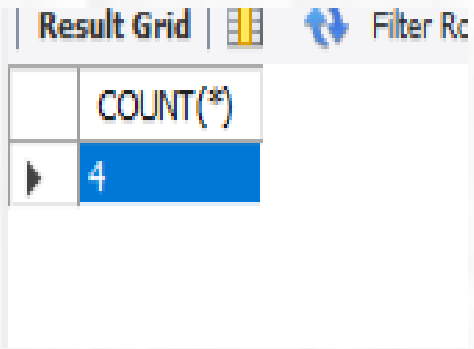
5. WAQTD THE MAXIMUM AGE OF PATIENT IN B+VE AND AFFECTED CANCER?

```
SELECT MAX(AGE) FROM PATIENT WHERE BLOOD_TYPE='B+VE' AND DISEASE='CANCER';
```



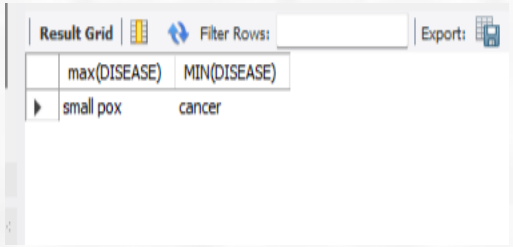
6.WAQTD THE NUMBER OF PATIENTS IN O+VE?

```
SELECT COUNT(*) FROM PATIENT WHERE BLOOD_TYPE='O+VE';
```



7. WAQTD THE MAXIMUM AND MINIMUM DISEASES WHOSE NAME HAVING CHAR 'R'?

```
SELECT max(DISEASE),MIN(DISEASE) FROM PATIENT WHERE PNAME LIKE '%R%';
```



8. WAQTD THE NUMBER OF PATIENTS IN BLOOD ID 7698 IN EACH BLOODTYPE?

```
SELECT COUNT(*),BLOOD_TYPE FROM PATIENT WHERE REFERRALS=7698 GROUP BY
BLOOD_TYPE;
```

COUNT(*)	BLOOD_TYPE
1	b+ve
2	a+ve
1	o+ve
1	ab+ve

9. WAQTD THE BLOODTYPE AND NUMER OF REF_ID IN EACH BLOOD_TYPE IF THE REFERENCE ID IS REPEATED?

```
SELECT count(ref_id), BLOOD_TYPE FROM PATIENT  GROUP BY BLOOD_TYPE HAVING
count(ref_id)>1;
```

	count(ref_id)	BLOOD_TYPE
▶	3	b+ve
	4	a+ve
	4	o+ve
	2	ab+ve

10. WAQTD THE MAXIMUM AGE ,REFERENCE ID AND DISEASE IN EACH REFERENCE ID AND AFFECTED BY CANCER IF AGE IS EXCEEDS 30?

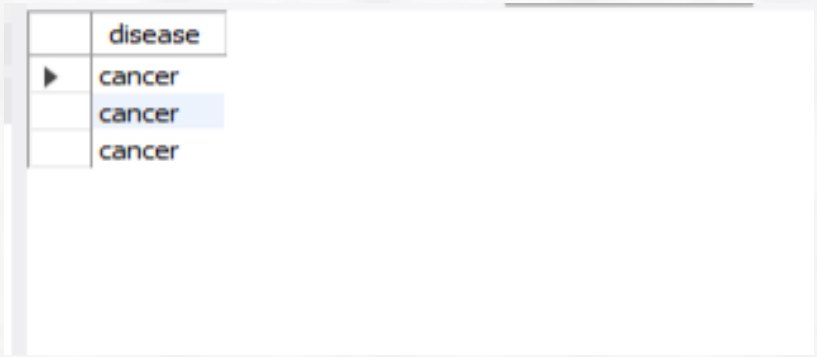
```
SELECT MAX(AGE), REF_ID , DISEASE FROM PATIENT WHERE DISEASE='CANCER' GROUP by
REF_ID HAVING MAX(AGE)>30;
```

Result Grid | Filter Rows:

	MAX(AGE)	REF_ID	DISEASE
▶	32	7369	cancer

11. WQATD THE DISEASE SAME AS AFFECTED BY VICTOR?

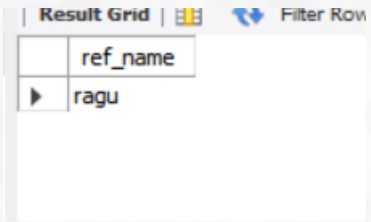
```
select disease from patient where disease=(select disease from patient where  pname='victor');
```



	disease
▶	cancer
	cancer
	cancer

12. waqtd the referrals of bala ?

```
select ref_name from patient where ref_id=(select referrals from patient
where  ref_name ='bala');
```



Result Grid | Filter Row

	ref_name
▶	ragu

13. WAQTD THE REFERRAL NAME AND WHO WERE REFFERRED BY WHOM?

```
select p1.ref_name as referral, p2.ref_name as referred_by from patient p1,
patient p2 where p1.ref_id=p2.referrals;
```

referral	referred_by
ragu	bala
vivek	mugun
vivek	minu
adams	suba
vivek	hari
adams	vivek
adams	velu
suba	priya
vivek	adams
priya	jp
vivek	vino
suba	mani
velu	ragu

14. WAQTD THE PATIENT NAME AND DONOR NAMES?

```
SELECT PNAME, DNAME FROM PATIENT INNER JOIN DONOR ON
PATIENT.PID=DONOR.PID;
```

PNAME	DNAME
smith	raghu
parker	joshi
john	shree
victor	Mark

15. WAQTD THE PATIENT NAME AND DONOR NAME EVEN THE PATIENT HAS NO DONOR?

```
SELECT PNAME, DNAME FROM PATIENT LEFT JOIN DONOR ON
PATIENT.PID=DONOR.PID;
```

PNAME	DNAME
victor	Mark
parker	joshi
smith	raghu
john	shree
mike	NULL
robin	NULL
leo	NULL
mugen	NULL
antony	NULL
joseph	NULL
dass	NULL
lawrence	NULL
amar	NULL

WAQTD THE PATIENT NAME AND DONOR NAME EVEN THE PATIENT HAS NO DONOR?


THANK
YOU!