

SQL PROJECT

NAME : ROHIT DATTATRAY SONAWALE

DATABASE NAME : Education_info

city table

```
CREATE TABLE city(city_id int NOT null,city_name varchar(50) NOT null,city_pin  
int NOT null, PRIMARY KEY(city_id));
```

```
INSERT INTO city  
VALUES(1,"agra",10),(2,"delhi",20),(3,"mumbai",30),(4,"banglore",40),(5,"nashi  
k",50);
```

city_id	city_name	city_pin
1	agra	10
2	delhi	20
3	mumbai	30
4	banglore	40
5	nashik	50

Courses table

```
CREATE TABLE courses(course_id int NOT null,course_name varchar(50) NOT null,course_duration int NOT null, PRIMARY KEY(course_id));
```

```
INSERT INTO courses
```

```
VALUES(1,"MBA",2),(2,"Btech",3),(3,"CA",5),(4,"BBA",3),(5,"BCA",3);
```

course_id	course_name	course_duration
1	MBA	2
2	Btech	3
3	CA	5
4	BBA	3
5	BCA	3

Student_info table

```
CREATE TABLE student_info(stu_id int NOT null,name varchar(50) NOT null,age int NOT null,gender varchar(10) NOT null,marks int not null,fees int NOT null,phone int NOT null,city int NOT null,PRIMARY KEY(stu_id),FOREIGN KEY(city) REFERENCES city(city_id));
```

```
INSERT INTO student_info VALUES(1,"ramesh kumar",19,"male",70,10000,12345,1),(2,"kalpana chawala",21,"female",75,20000,67890,2),(3,"sharukh khan",20,"male",80,30000,95678,1),(4,"anil
```

kumar",23,"male",60,70000,22334,3),(5,"suraj
pawar",18,"male",65,80000,55664,4),(6,"sakshi
yadav",20,"female",32,60000,87054,5),(7,"vishal
more",21,"male",38,50000,22115,3),(8,"sarita
kumari",22,"female",30,40000,46732,2);

stu_id	name	age	gender	marks	fees	phone	city
1	ramesh kumar	19	male	70	10000	12345	1
2	kalpana chawala	21	female	75	20000	67890	2
3	sharukh khan	20	male	80	30000	95678	1
4	anil kumar	23	male	60	70000	22334	3
5	suraj pawar	18	male	65	80000	55664	4
6	sakshi yadav	20	female	32	60000	87054	5
7	vishal more	21	male	38	50000	22115	3
8	sarita kumari	22	female	30	40000	46732	2

- Display ID,name and fees of students.

```
SELECT stu_id,name,fees FROM student_info;
```

stu_id	name	fees
1	ramesh kumar	10000
2	kalpana chawala	20000
3	sharukh khan	30000
4	anil kumar	70000
5	suraj pawar	80000
6	sakshi yadav	60000
7	vishal more	50000
8	sarita kumari	40000

- Display id, name, age, gender of students having age greater than 20.

```
SELECT stu_id,name,age,gender FROM student_info  
WHERE age > 20;
```

stu_id	name	age	gender
2	kalpana chawala	21	female
4	anil kumar	23	male
7	vishal more	21	male
8	sarita kumari	22	female

- Display the name of the students whose name start with s.

```
SELECT name FROM student_info WHERE name LIKE "s%";
```

name
sharukh khan
suraj pawar
sakshi yadav
sarita kumari

- Display the students information who's age is between 18 and 21.

```
SELECT * FROM student_info WHERE age BETWEEN 18 AND 21;
```

stu_id	name	age	gender	marks	fees	phone	city
1	ramesh kumar	19	male	70	10000	12345	1
2	kalpana chawala	21	female	75	20000	67890	2
3	sharukh khan	20	male	80	30000	95678	1
5	suraj pawar	18	male	65	80000	55664	4
6	sakshi yadav	20	female	32	60000	87054	5
7	vishal more	21	male	38	50000	22115	3

- Display the name of the student whose name start with "k" and end with "a".

```
SELECT name FROM student_info WHERE name LIKE "k%a";
```

name

kalpana chawala

- Display the id, name and age of the student whose name end with “khan”.

```
SELECT stu_id,name,age FROM student_info WHERE name REGEXP "khan$";
```

stu_id	name	age
3	sharukh khan	20

- Display the name of the student in descending order.

```
SELECT * FROM student_info ORDER BY name DESC;
```

stu_id	name ▼ 1	age	gender	marks	fees	phone	city
7	vishal more	21	male	38	50000	22115	3
5	suraj pawar	18	male	65	80000	55664	4
3	sharukh khan	20	male	80	30000	95678	1
8	sarita kumari	22	female	30	40000	46732	2
6	sakshi yadav	20	female	32	60000	87054	5
1	ramesh kumar	19	male	70	10000	12345	1
2	kalpana chawala	21	female	75	20000	67890	2
4	anil kumar	23	male	60	70000	22334	3

- Display the distinct ages of the students and shows it as distinct ages.

```
SELECT DISTINCT age AS "distinct  
age" FROM student_info;
```

distinct age
19
21
20
23
18
22

- Display the first five records of the student table.

```
SELECT * FROM student_info LIMIT 5;
```


stu_id	name	age	gender	marks	fees	phone	city
1	ramesh kumar	19	male	70	10000	12345	1
2	kalpana chawala	21	female	75	20000	67890	2
3	sharukh khan	20	male	80	30000	95678	1
4	anil kumar	23	male	60	70000	22334	3
5	suraj pawar	18	male	65	80000	55664	4

●Display the maximum fees of the student.

```
SELECT max(fees) AS "maximum fees" FROM student_info;
```

maximum fees

80000

●Display the total fees of the student.

```
SELECT SUM(fees) AS "total fees" FROM student_info;
```

total fees

360000

●Display the name of the student who are from agra city

```
SELECT  
name FROM student_info  
WHERE city=(SELECT city_id FROM city WHERE city_name="agra");
```

name

ramesh kumar

sharukh khan

● INNER JOIN

```
SELECT * FROM
```

```
student_info INNER JOIN city
```

```
ON student_info.city=city.city_id;
```

stu_id	name	age	gender	marks	fees	phone	city	city_id	city_name	city_pin
1	ramesh kumar	19	male	70	10000	12345	1	1	agra	10
2	kalpana chawala	21	female	75	20000	67890	2	2	delhi	20
3	sharukh khan	20	male	80	30000	95678	1	1	agra	10
4	anil kumar	23	male	60	70000	22334	3	3	mumbai	30
5	suraj pawar	18	male	65	80000	55664	4	4	banglore	40
6	sakshi yadav	20	female	32	60000	87054	5	5	nashik	50
7	vishal more	21	male	38	50000	22115	3	3	mumbai	30
8	sarita kumari	22	female	30	40000	46732	2	2	delhi	20

● LEFT JOIN

```
SELECT * FROM  
student_info LEFT JOIN city  
ON student_info.city=city.city_id;
```

stu_id	name	age	gender	marks	fees	phone	city	city_id	city_name	city_pin
1	ramesh kumar	19	male	70	10000	12345	1	1	agra	10
2	kalpana chawala	21	female	75	20000	67890	2	2	delhi	20
3	sharukh khan	20	male	80	30000	95678	1	1	agra	10
4	anil kumar	23	male	60	70000	22334	3	3	mumbai	30
5	suraj pawar	18	male	65	80000	55664	4	4	banglore	40
6	sakshi yadav	20	female	32	60000	87054	5	5	nashik	50
7	vishal more	21	male	38	50000	22115	3	3	mumbai	30
8	sarita kumari	22	female	30	40000	46732	2	2	delhi	20

●RIGHT JOIN

```
SELECT
```

```
student_info.stu_id,student_info.name,student_info.marks,student_info.  
gender,city.city_name
```

```
FROM student_info RIGHT JOIN city
```

```
ON student_info.city=city.city_id;
```

stu_id	name	marks	gender	city_name
1	ramesh kumar	70	male	agra
3	sharukh khan	80	male	agra
2	kalpana chawala	75	female	delhi
8	sarita kumari	30	female	delhi
4	anil kumar	60	male	mumbai
7	vishal more	38	male	mumbai
5	suraj pawar	65	male	banglore
6	sakshi yadav	32	female	nashik

●CROSS JOIN

```
SELECT  
student_info.stu_id, student_info.name, city.city_id, city  
.city_name  
FROM student_info CROSS JOIN city;
```

stu_id	name	city_id	city_name
1	ramesh kumar	1	agra
1	ramesh kumar	2	delhi
1	ramesh kumar	3	mumbai
1	ramesh kumar	4	banglore
1	ramesh kumar	5	nashik
2	kalpana chawala	1	agra
2	kalpana chawala	2	delhi
2	kalpana chawala	3	mumbai
2	kalpana chawala	4	banglore
2	kalpana chawala	5	nashik
3	sharukh khan	1	agra
3	sharukh khan	2	delhi
3	sharukh khan	3	mumbai
3	sharukh khan	4	banglore
3	sharukh khan	5	nashik
4	anil kumar	1	agra
4	anil kumar	2	delhi
4	anil kumar	3	mumbai
4	anil kumar	4	banglore
4	anil kumar	5	nashik
5	suraj pawar	1	agra
5	suraj pawar	2	delhi
5	suraj pawar	3	mumbai
5	suraj pawar	4	banglore
5	suraj pawar	5	nashik

●If the student marks greater than equal to 35 then they will be pass and if the student marks less than 35 then they will be fail,show with the help of sql.

```
SELECT stu_id,name,marks,  
IF(marks >= 35,"pass","fail") AS "Result"  
FROM student_info;
```

stu_id	name	marks	Result
1	ramesh kumar	70	pass
2	kalpana chawala	75	pass
3	sharukh khan	80	pass
4	anil kumar	60	pass
5	suraj pawar	65	pass
6	sakshi yadav	32	fail
7	vishal more	38	pass
8	sarita kumari	30	fail

- Convert the name of the student into the uppercase.

```
SELECT stu_id,UPPER(name) FROM student_info;
```

stu_id	UPPER(name)
1	RAMESH KUMAR
2	KALPANA CHAWALA
3	SHARUKH KHAN
4	ANIL KUMAR
5	SURAJ PAWAR
6	SAKSHI YADAV
7	VISHAL MORE
8	SARITA KUMARI

- combine the name and marks column.

```
SELECT stu_id,concat(name,marks)AS NAME  
FROM student_info;
```


stu_id	NAME
1	ramesh kumar70
2	kalpana chawala75
3	sharukh khan80
4	anil kumar60
5	suraj pawar65
6	sakshi yadav32
7	vishal more38
8	sarita kumari30

●shows students marks increase by 2.

```
SELECT stu_id,name, (marks + 2) AS "NEW MARKS"
FROM student info;
```

stu_id	name	NEW MARKS
1	ramesh kumar	72
2	kalpana chawala	77
3	sharukh khan	82
4	anil kumar	62
5	suraj pawar	67
6	sakshi yadav	34
7	vishal more	40
8	sarita kumari	32