SQL Learning from scratch

-- set 6



-- Join
-- left join
-- right join
-- outer join
-- inner join

- -- 1. write a query to get all employee
- select * from EMP;

| | EMP_ID | FNAME | LNAME | Salary | join_Date | DEPT | Gender |
|---|--------|--------------|---------|----------|------------|---------|--------|
| 1 | 1 | Vikas | Ahlawat | 600000 | 2013-02-15 | IT | Male |
| 2 | 2 | Nikita | Jain | 530000 | 2014-01-09 | HR | Female |
| 3 | 3 | Ashish | Kumar | 10000000 | 2014-01-09 | IT | Male |
| 4 | 4 | Nikhil | Sharma | 480000 | 2014-01-09 | HR | Male |
| 5 | 5 | Anish | Kadian | 600000 | 2013-02-15 | Payroll | Male |



Query_New_table

```
CREATE table prjct_details
(
prjct_id int,
emp_id int,
prjct_name char(20)
);
```

Messages

Commands completed successfully.

Completion time: 2023-06-06T15:16:42.3561295-04:00



Query_Insert_Values

```
    insert into prjct details values ( 1,1,

  'Task Track' );

    insert into prjct_details values (2, 1, 'CLP');

    insert into prjct details values (3, 1,

   |Survey mngment');

    insert into prjct_details values (4, 2,

   'HR mngment');

    insert into prjct_details values (5, 3, 'Task_track');

    insert into prjct details values (6, 3,

   'GRS');

    insert into prict details values (7, 3,

   'DDS');

    insert into prjct_details values (8, 4,

   'HR Mngment');

    insert into prict details values (9, 6,

   'GL mngmt');
```

Messages (1 row affected) (1 row affected)





Query_table_two

- -- 1. write a query to get all employee
- select * from Prject_details;

| ⊞ Re | sults 🗊 | Messages | 3 |
|------|----------|----------|----------------|
| | prjct_id | emp_id | prjct_name |
| 1 | 1 | 1 | Task Track |
| 2 | 2 | 1 | CLP |
| 3 | 3 | 1 | Survey_mngment |
| 4 | 4 | 2 | HR_mngment |
| 5 | 5 | 3 | Task_track |
| 6 | 6 | 3 | GRS |
| 7 | 7 | 3 | DDS |
| 8 | 8 | 4 | HR_Mngment |
| 9 | 9 | 6 | GL_mngmt |



- -- 1. print emp_name, prjct name with their assigned projct.
- select rtrim(emp.fname+emp.lname), p.prjct_name
- from emp as emp
- inner join prjct_details as p
- ON p.emp_id = emp.emp_id

| ⊞ F | Results Messages | | |
|-----|------------------|---------|----------------|
| | (No column name) | | prjct_name |
| 1 | Vikas | Ahlawat | Task Track |
| 2 | Vikas | Ahlawat | CLP |
| 3 | Vikas | Ahlawat | Survey_mngment |
| 4 | Nikita | Jain | HR_mngment |
| 5 | Ashish | Kumar | Task_track |
| 6 | Ashish | Kumar | GRS |
| 7 | Ashish | Kumar | DDS |
| 8 | Nikhil | Sharma | HR_Mngment |



- -- 1. print emp_name, prjct name with their assigned projct.
- select rtrim(emp.fname+emp.lname), p.prjct_name
- from emp as emp
- inner join prjct_details as p
- ON p.emp_id = emp.emp_id

| ⊞ Re | ■ Results | | | | |
|--------|------------------|----------------|--|--|--|
| | fname prjct_name | | | | |
| 1 | Anish | NULL | | | |
| 2 | Ashish | Task_track | | | |
| 3 | Ashish | GRS | | | |
| 4 | Ashish | DDS | | | |
| 5 | Nikhil | HR_Mngment | | | |
| 6-lick | Nikita | HR_mngment | | | |
| 7 | Vikas | Task Track | | | |
| 8 | Vikas | CLP | | | |
| 9 | Vikas | Survey_mngment | | | |



- -- 3. print emp_name, prjct_name, even if not the project assignend print no project assigned.
- select e. fname, isnull(prjct_name, 'No Project assigned') as project
- from emp as e
- Left Outer Join prjct_details as p
- ON e.emp_id = p.emp_id
- order by e.fname

| ⊞ F | ■ Results | | | | |
|-----|-----------|---------------------|--|--|--|
| | fname | project | | | |
| 1 | Anish | No Project assigned | | | |
| 2 | Ashish | Task_track | | | |
| 3 | Ashish | GRS | | | |
| 4 | Ashish | DDS | | | |
| 5 | Nikhil | HR_Mngment | | | |
| 6 | Nikita | HR_mngment | | | |
| 7 | Vikas | Task Track | | | |
| 8 | Vikas | CLP | | | |
| 9 | Vikas | Survey_mngment | | | |



- -- 4. print all projets even if they has no assigned employees
- select e.fname, p.prjct_name
- from emp as e
- Right Outer Join prjct_details as p
- ON e.emp_id = p.emp_id
- order by e.fname

| ⊞ Re | sults 🗐 | Messages | |
|------|---------|----------------|--|
| | fname | prjct_name | |
| 1 | NULL | GL_mngmt | |
| 2 | Ashish | Task_track | |
| 3 | Ashish | GRS | |
| 4 | Ashish | DDS | |
| 5 | Nikhil | HR_Mngment | |
| 6 | Nikita | HR_mngment | |
| 7 | Vikas | Task Track | |
| 8 | Vikas | CLP | |
| 9 | Vikas | Survey_mngment | |

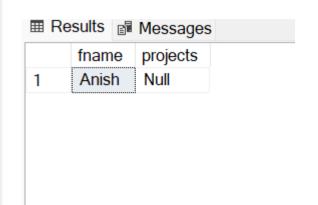


- -- 5. print all records from both tables
- select E.emp_id, E.fname, P.prjct_name
- FROM emp as E
- FULL outer join prjct_details as P
- ON e.emp_id = p.emp_id
- order by e.fname

| ■ Results | | | | | | |
|-----------|--------|--------|----------------|--|--|--|
| | emp_id | fname | prjct_name | | | |
| 1 | NULL | NULL | GL_mngmt | | | |
| 2 | 5 | Anish | NULL | | | |
| 3 | 3 | Ashish | Task_track | | | |
| 4 | 3 | Ashish | GRS | | | |
| 5 | 3 | Ashish | DDS | | | |
| 6 | 4 | Nikhil | HR_Mngment | | | |
| 7 | 2 | Nikita | HR_mngment | | | |
| 8 | 1 | Vikas | Task Track | | | |
| 9 | 1 | Vikas | CLP | | | |
| 10 | 1 | Vikas | Survey_mngment | | | |

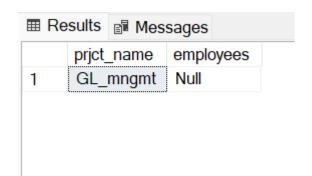


- -- 6. print the employee has no assigned project
- select E.fname, isnull(P.prjct_name, 'Null') as projects
- FROM emp as E
- left outer join prjct_details as P
- ON e.emp_id = P.emp_id
- WHERE P.prjct_name IS NULL
- Order by e.fname





- -- 7. print the name of projects which has no assigned employees
- select P.prjct_name, isnull(E.fname, 'Null') as employees
- FROM emp as E
- full outer join prjct_details as P
- ON e.emp_id = P.emp_id
- WHERE e.fname IS NULL





- -- 8. print the employees assigned for more than a project.
- select E.fname, P.prjct_name as projects
- FROM emp as E
- inner join prjct_details as P
- ON E.emp_id = P.emp_id
- WHERE E.emp_ID IN (
- SELECT emp_ID
- FROM prjct_details
- GROUP BY emp_ID
- HAVING count(*) >2);

| ⊞ Re | ■ Results | | | | |
|------|-----------|----------------|--|--|--|
| | fname | projects | | | |
| 1 | Vikas | Task Track | | | |
| 2 | Vikas | CLP | | | |
| 3 | Vikas | Survey_mngment | | | |
| 4 | Ashish | Task_track | | | |
| 5 | Ashish | GRS | | | |
| 6 | Ashish | DDS | | | |
| | | | | | |



- -- 9. Print the name of projects who has more than 1 employees.
- SELECT E.fname, P.prjct_name as projects
- FROM prjct_details as P
- INNER JOIN emp as e
- ON p.emp_id = E.emp_id
- WHERE p.prjct_name IN(
- SELECT prjct_name
- from prjct_details
- group by prjct_name);

| | fname | projects |
|---|--------|----------------|
| 1 | Vikas | Task Track |
| 2 | Vikas | CLP |
| 3 | Vikas | Survey_mngment |
| 4 | Nikita | HR_mngment |
| 5 | Ashish | Task_track |
| 6 | Ashish | GRS |
| 7 | Ashish | DDS |
| 8 | Nikhil | HR_Mngment |



