1. Difference between SQL and PSQL

   → PSQL is an object-relational database, while Microsoft SQL Server is a relational database system. This means PostgreSQL offers more complex data types and allows object inheritance, though it also makes working with PostgreSQL more complex.
   → PSQL is casesensitive and SQL is not
   → PSQL has more data-types then SQL

2. install psql if not installed
   → sudo apt-get install postgresql
3. Create DataBase
   → createdb employees

   Get into the database
   → psql -d employees -U odoo

```
odoo@ICAPC0015:~$ psql -l
                                  List of databases
   Name    |  Owner   | Encoding | Collate | Ctype |   Access privileges
-----------+----------+----------+---------+-------+-----------------------
 employees | odoo     | UTF8     | en_IN   | en_IN |
 postgres  | postgres | UTF8     | en_IN   | en_IN |
 template0 | postgres | UTF8     | en_IN   | en_IN | =c/postgres          +
           |          |          |         |       | postgres=CTc/postgres
 template1 | postgres | UTF8     | en_IN   | en_IN | =c/postgres          +
           |          |          |         |       | postgres=CTc/postgres
(4 rows)

odoo@ICAPC0015:~$ psql -d employees -U odoo
psql (14.15 (Ubuntu 14.15-0ubuntu0.22.04.1))
Type "help" for help.
```

4. Create tables
   → CREATE TABLE Employees(Employee_ID INT PRIMARY KEY, Employee_Name VARCHAR(100), Department VARCHAR(50));
   →CREATE TABLE Projects(Project_ID INT PRIMARY KEY, Project_Name VARCHAR(100), Employee_ID INT REFERENCES Employees(Employee_ID));

```
employees=> CREATE TABLE Projects(Project_ID INT PRIMARY KEY, Project_Name VARCHAR(100), Employee_ID INT REFERENCES Employees(Employee_ID));
CREATE TABLE
```

```
employees=> CREATE TABLE Employees(Employee_ID INT PRIMARY KEY, Employee_Name VARCHAR(100), Department VARCHAR(50));
CREATE TABLE
```

5. Insert data into table

   → INSERT INTO Employees(Employee_ID, Employee_Name, Department) VALUES (1530, 'Vishant Bhavsar', 'REP'), (1560, 'Chahat Shah', 'ERP'), (1590, 'Rushabh Bhavsar', 'Sells');

   →INSERT INTO Projects(Project_ID, Project_Name, Employee_ID) VALUES (1010, 'Website Redesign', 1530), (1100, 'Recruitment Drive', 1560), (1250, 'Ad Campaign', 1590);

```
employees=> INSERT INTO Employees(Employee_ID, Employee_Name, Department) VALUES (1530, 'Vishant Bhavsar', 'REP'), (1560, 'Chahat Shah', 'ERP
), (1590, 'Rushabh Bhavsar', 'Sells');
INSERT 0 3
employees=> INSERT INTO Projects(Project_ID, Project_Name, Employee_ID) VALUES (1010, 'Website Redesign', 1530), (1100, 'Recruitment Drive',
560), (1250, 'Ad Campaign', 1590);
INSERT 0 3
```

   → SELECT * FROM Employees; SELECT * FROM Projects;

```
employees=> SELECT * FROM Employees; SELECT * FROM Projects;
 employee_id |  employee_name  | department
-------------+-----------------+------------
        1530 | Vishant Bhavsar | REP
        1560 | Chahat Shah     | ERP
        1590 | Rushabh Bhavsar | Sells
(3 rows)

 project_id |   project_name    | employee_id
------------+-------------------+-------------
       1010 | Website Redesign  |        1530
       1100 | Recruitment Drive |        1560
       1250 | Ad Campaign       |        1590
(3 rows)
```

6. Print the table

   → SELECT Employees.Employee_Name, Projects.Project_Name FROM Employees INNER JOIN Projects ON Employees.Employee_ID = Projects.Employee_ID;

```
employees=> SELECT Employees.Employee_Name, Projects.Project_Name FROM Employees INNER JOIN Projects ON Employees.Employee_ID = Projects.Emplo
yee_ID;
  employee_name  |   project_name
-----------------+------------------
 Vishant Bhavsar | Website Redesign
 Chahat Shah     | Recruitment Drive
 Rushabh Bhavsar | Ad Campaign
(3 rows)
```