

Maharashtra State Board Class 11 Information Technology

Practicals Skill Set 6 DBMS (PostgreSQL)

SOP 1: Create a database, using Postgres SQL named hospital.

- In this database, create a table of patients with the following fields
Patient_ID, Patients_Name, Address, Room_number and Doctor's_name.
- Give appropriate data type for each field.

Patient_ID	Patient_name	Address	Room_number	Doctor's_name

Answer:

Step 1: Open Command Terminal. Switch over to the Postgres account on your server by typing.
\$ sudo -i -u Postgres

Step 2: You can now access a Postgres prompt immediately by typing.
\$ psql

Step 3: To create a database hospital;
create database hospital;

Step 4: Connect to Database using \c
\c hospital;

Step 5: Create a table in the database. Create Table Command is used.
create table patients(patients_Id Integer,patients_name text,Address text,Room_number integer,Doctor_name text);

Step 6: Let's see the result of the patient's table.
select * from patients;
or
\d patients;



SOP 2: Create a database using PostgreSQL named Schoolmaster.

- In this database create a table of students with the following fields
student_ID, student_name, Address, Phone_number, Date_of_Birth.
- Give appropriate data types for each field. Enter at least 5 records.

Answer:

Step 1: Create a database School-Master.
create database school_master;

Step 2: Now To connect the database use \c Command.
\c database school_master;

Step 3: Create a table of students with the following fields. Give appropriate data type for each Field.

student_ID, student_name, Address. Phone_number, Date_of_Birth.

create table students(student_ID integer, student_name text,Address_text,Phone_number integer,Date_of_Birth date);

Step 4: Enter at least 5 records.

Insert into students values(001,'ZAHRA LALANIVMAZGAON',123456789,'20-08-2000');

Insert into students values(002,'MUHAMMAD LALANI'/BYCULLA', 987654210,'30-01-2000');

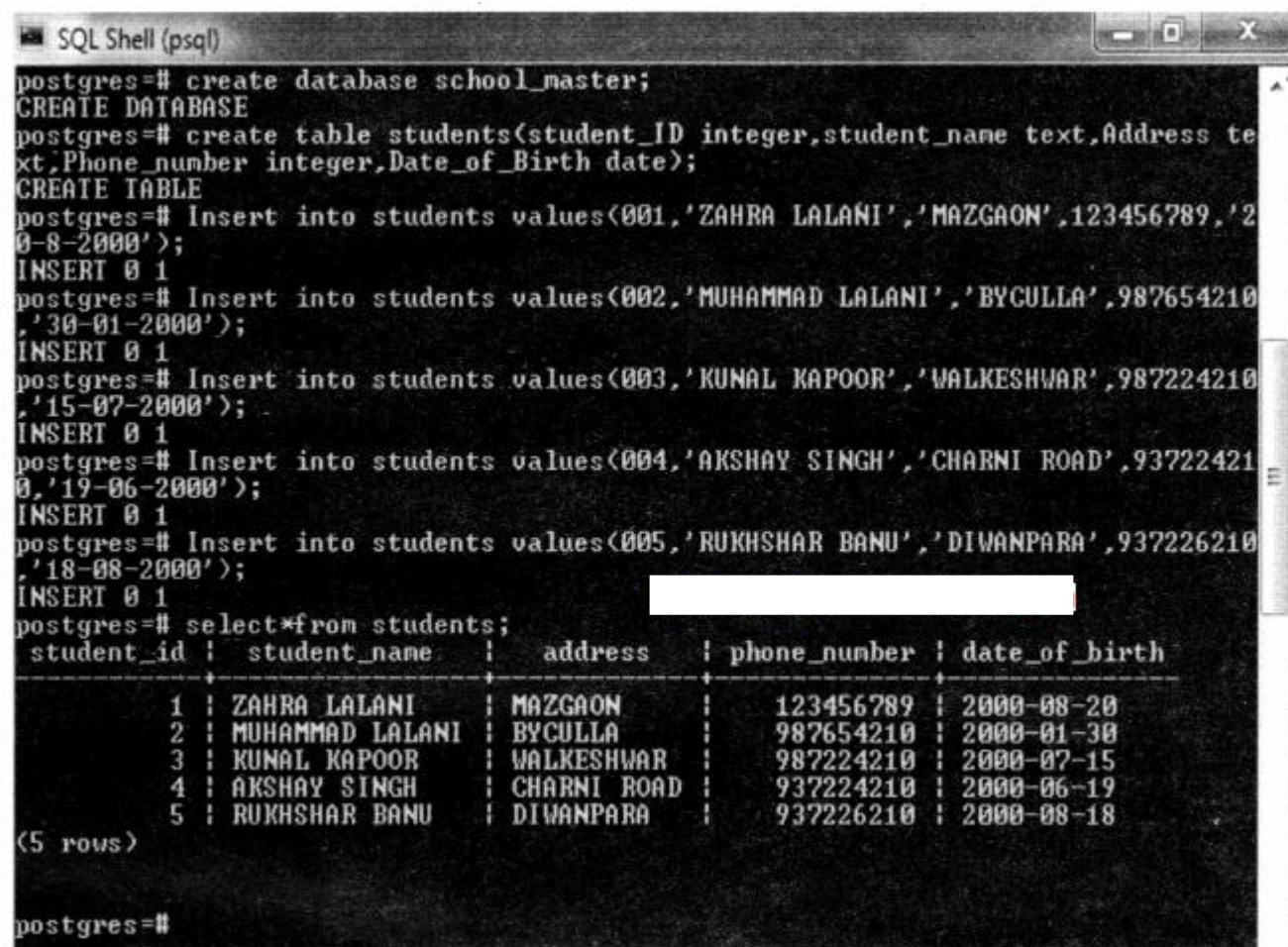
Insert into students values(003,'KUNAL KAPOOR','WALKESHWAR', 987224210,T5-7-2000');

Insert into students values(004,'AKSHAY SINGH','CHARNI ROAD'. 937224210,'19-6-2000');

Insert into students values(005,'RUKHSHAR BANU ','DIWANPARA', 937226210,'18-8-2000');

Step 5: Show all records using select command

select*from students;



```
SQL Shell (psql)
postgres=# create database school_master;
CREATE DATABASE
postgres=# create table students(student_ID integer,student_name text,Address te
xt,Phone_number integer,Date_of_Birth date);
CREATE TABLE
postgres=# Insert into students values(001,'ZAHRA LALANI','MAZGAON',123456789,'2
0-8-2000');
INSERT 0 1
postgres=# Insert into students values(002,'MUHAMMAD LALANI','BYCULLA',987654210
,'30-01-2000');
INSERT 0 1
postgres=# Insert into students values(003,'KUNAL KAPOOR','WALKESHWAR',987224210
,'15-07-2000');
INSERT 0 1
postgres=# Insert into students values(004,'AKSHAY SINGH','CHARNI ROAD',93722421
0,'19-06-2000');
INSERT 0 1
postgres=# Insert into students values(005,'RUKHSHAR BANU','DIWANPARA',937226210
,'18-08-2000');
INSERT 0 1
postgres=# select*from students;
 student_id | student_name | address | phone_number | date_of_birth
-----
1 | ZAHRA LALANI | MAZGAON | 123456789 | 2000-08-20
2 | MUHAMMAD LALANI | BYCULLA | 987654210 | 2000-01-30
3 | KUNAL KAPOOR | WALKESHWAR | 987224210 | 2000-07-15
4 | AKSHAY SINGH | CHARNI ROAD | 937224210 | 2000-06-19
5 | RUKHSHAR BANU | DIWANPARA | 937226210 | 2000-08-18
(5 rows)

postgres=#
```

SOP 3: Given the list of fields: Empld, EmpName, EmpDepartment, Salaryld, Salary Amount, Bonus in the tables Employee and Salary respectively. Define primary key, foreign key and segregate for above fields into employee and salary table. Also create a one-to-one relationship between Employee and Salary Table.

Answer:

Step 1: Create a school database

Create database school;

Step 2: connect to database \c databasename;

\c school;

Step 3: In this database create two tables Employee and Salary with the following fields. Define primary key, foreign key and segregate for above fields into employee and salary table. Empld, EmpName, EmpDepartment, Salaryld, SalaryAmount, Bonus.

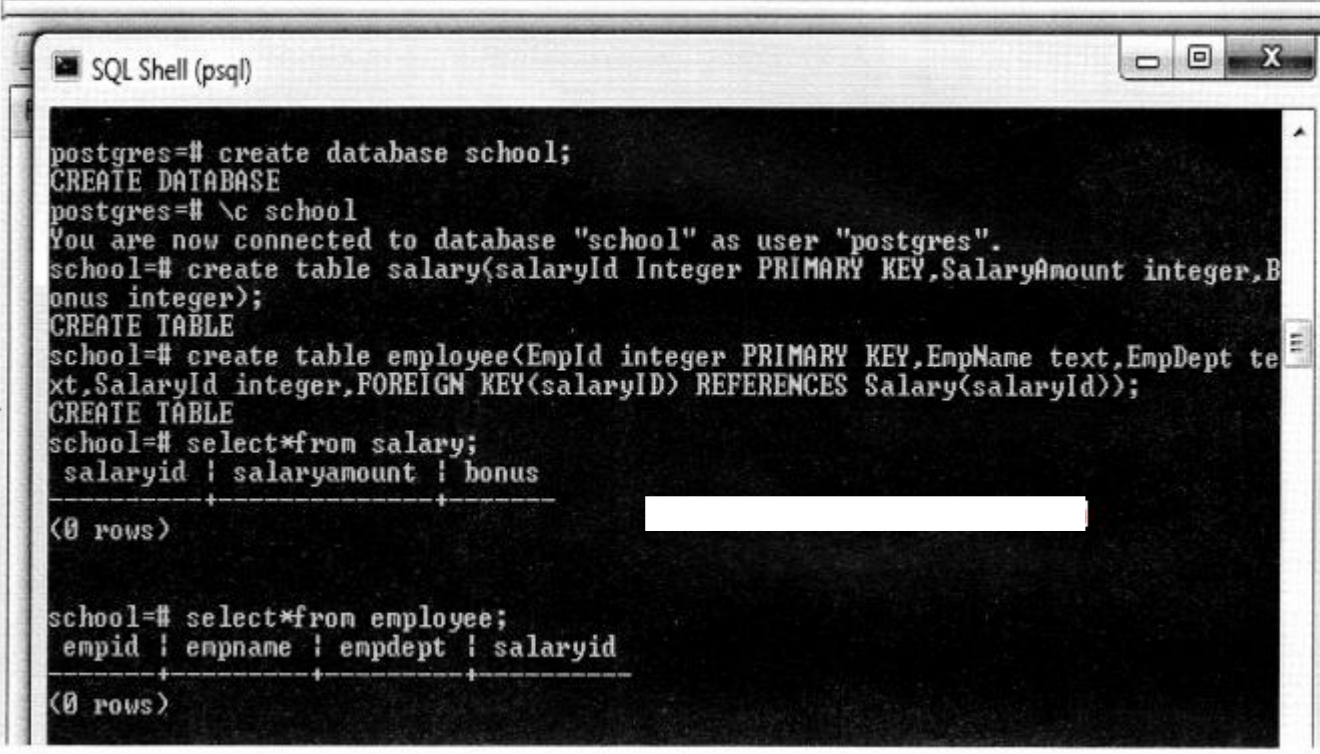
Create table salary(salaryld Integer PRIMARY KEY,Salaryamount integer,Bonus integer);

Create table employee(empld integer PRIMARY KEY,EmpName text,EmpDept text,Salaryld integer,FOREIGN KEY(salary ID)"REFERENCES Salary(salary id));

Step 4: See both tables

select*from salary;

select*from employee;



The screenshot shows a PostgreSQL SQL Shell window titled "SQL Shell (psql)". The terminal displays the following commands and output:

```
postgres=# create database school;
CREATE DATABASE
postgres=# \c school
You are now connected to database "school" as user "postgres".
school=# create table salary(salaryId Integer PRIMARY KEY,SalaryAmount integer,Bonus integer);
CREATE TABLE
school=# create table employee(EmpId integer PRIMARY KEY,EmpName text,EmpDept text,SalaryId integer,FOREIGN KEY(salaryID) REFERENCES Salary(salaryId));
CREATE TABLE
school=# select*from salary;
 salaryid | salaryamount | bonus 
-----+-----+-----
(0 rows)

school=# select*from employee;
 empid | empname | empdept | salaryid 
-----+-----+-----+-----
(0 rows)
```

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