Lab 07

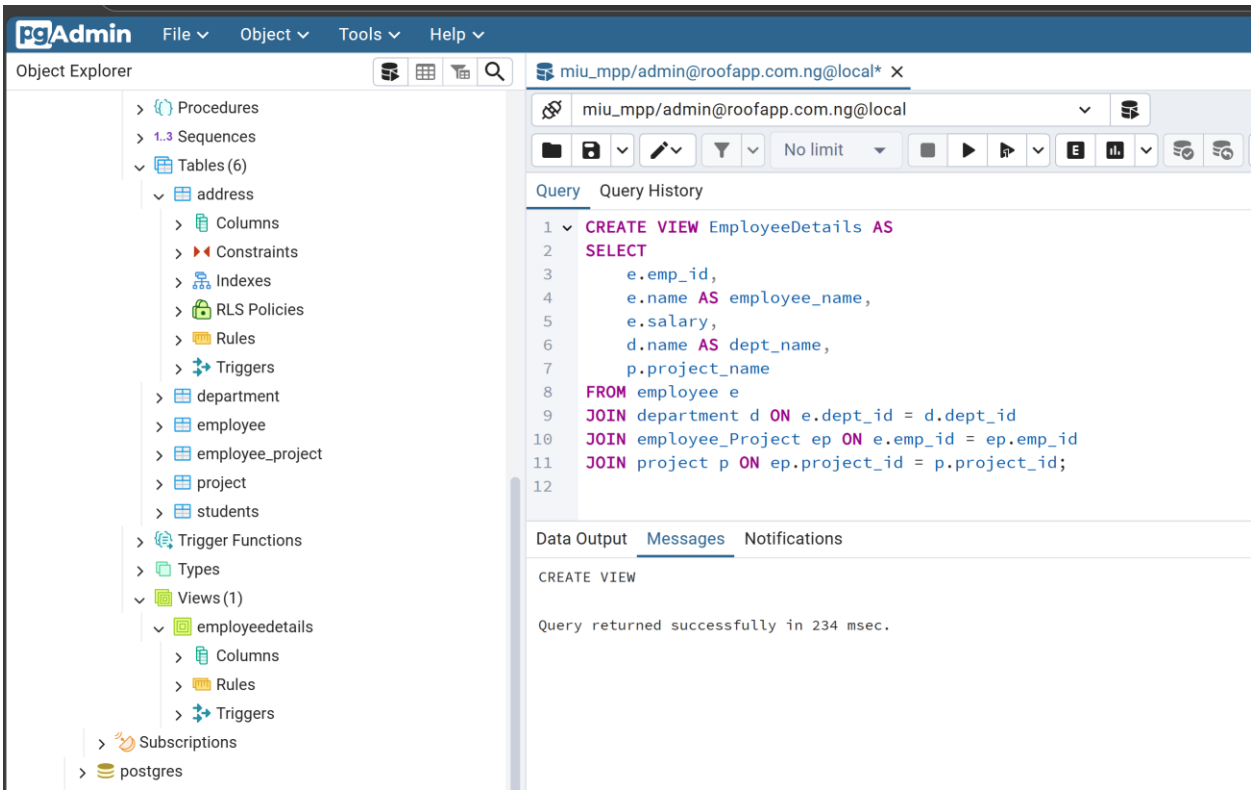
Student Name: **John Okon Ansa**
Student ID: **619952**

A. Creating a Database View

Create a **VIEW** named EmployeeDetails that joins the Employee, Department, and Project tables. The view should display the following columns:

- emp_id (from Employee)
- employee_name (from Employee, renamed to be distinct)
- salary
- dept_name (from Department)
- project_name (from Project)

```
CREATE VIEW EmployeeDetails AS
SELECT
   e.emp_id,
   e.name AS employee_name,
   e.salary,
   d.name AS dept_name,
   p.project_name
FROM employee e
JOIN department d ON e.dept_id = d.dept_id
JOIN employee_Project ep ON e.emp_id = ep.emp_id
JOIN project p ON ep.project_id = p.project_id;
```

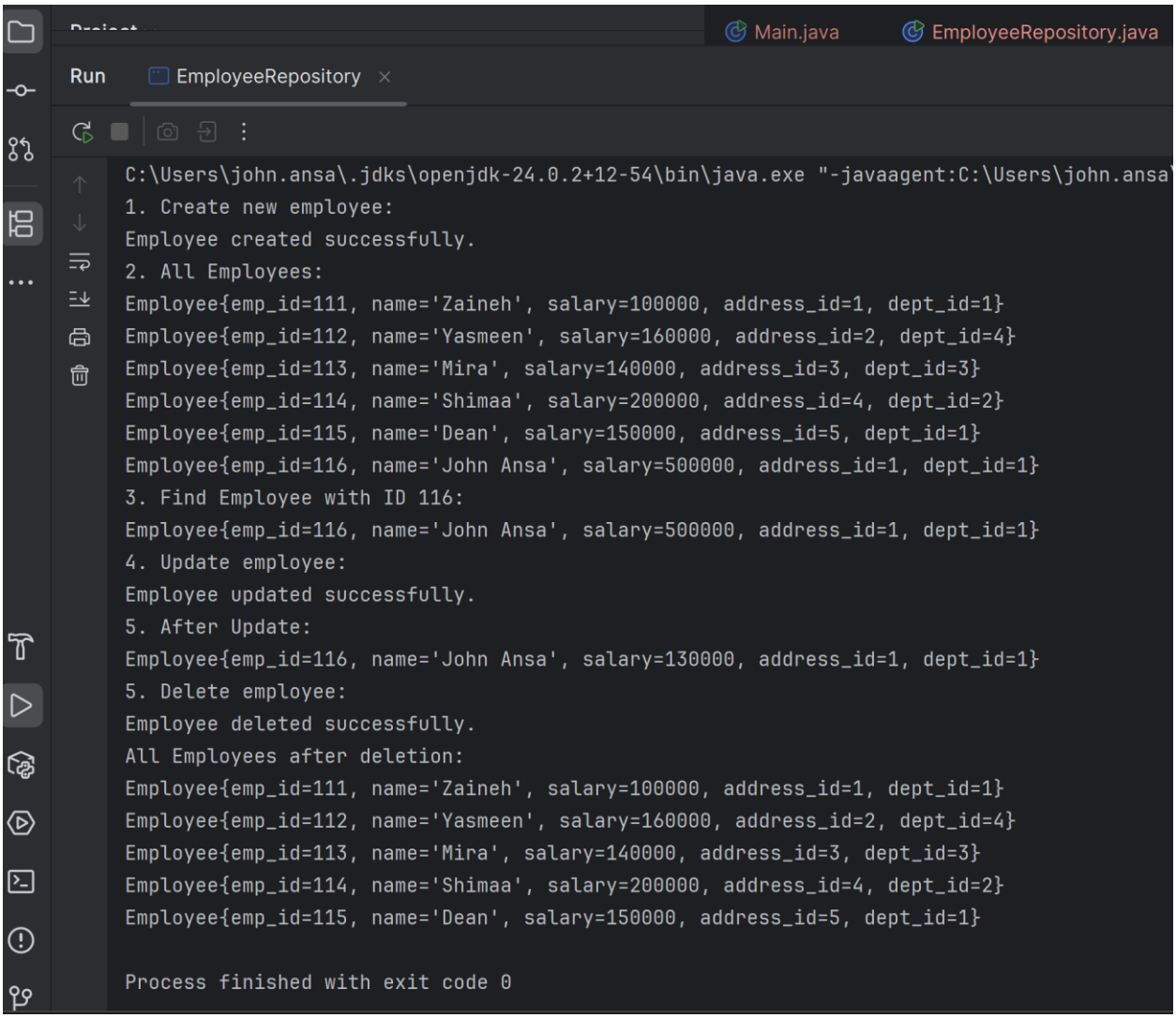


B. Adding an Index

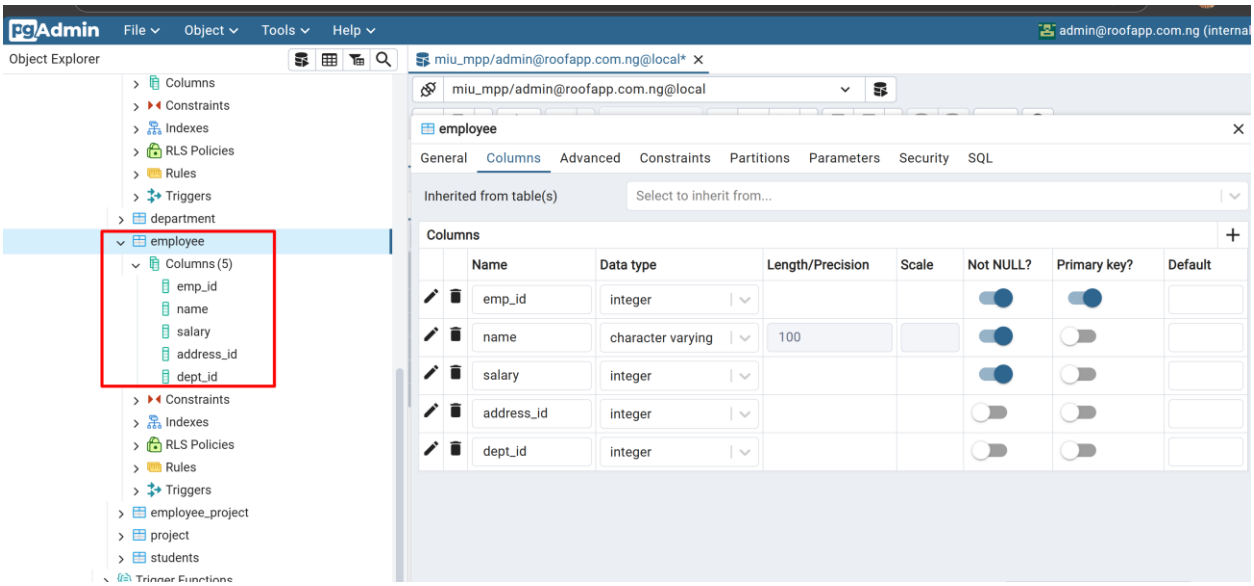
Add an INDEX named idx_employee_name to the name column of the Employee table.

CREATE INDEX idx_employee_name
ON Employee (name);

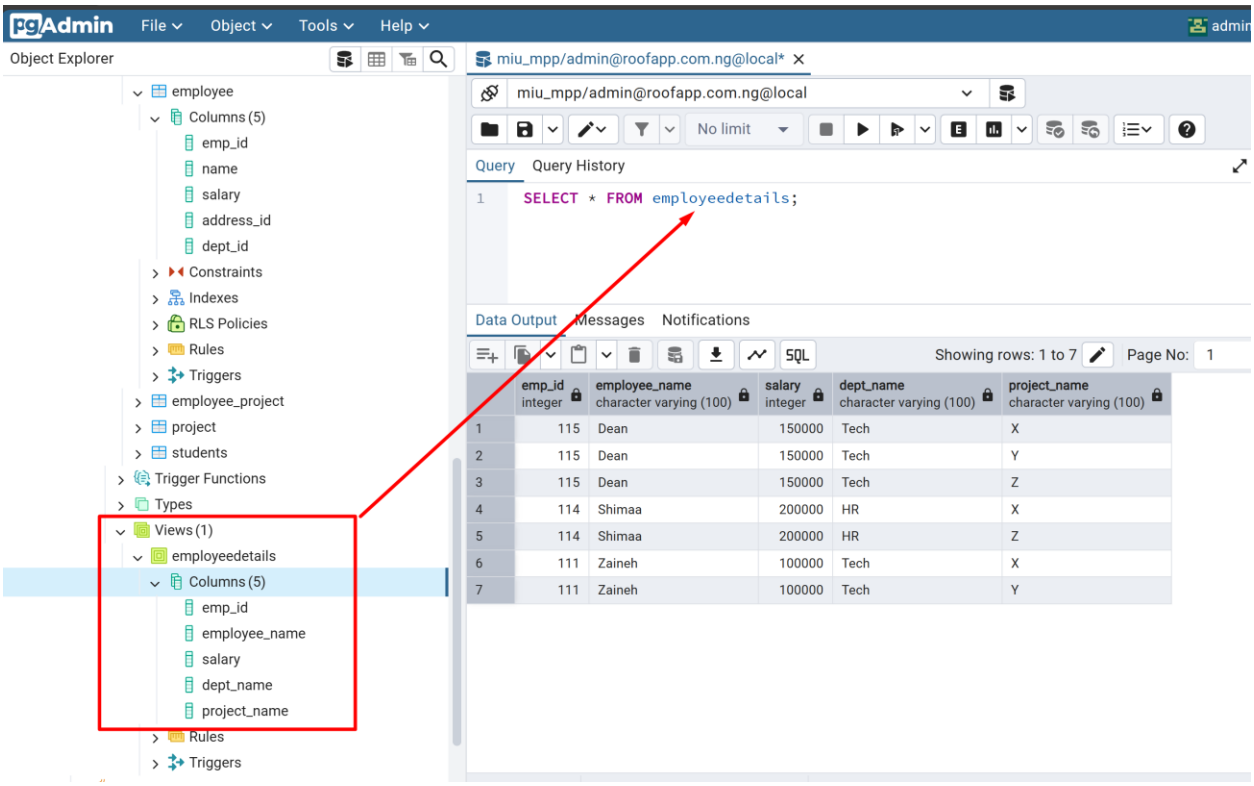
Solution:


Main.java
EmployeeRepository.java
Run
EmployeeRepository
C:\Users\john.ansa\.jdks\openjdk-24.0.2+12-54\bin\java.exe "-javaagent:C:\Users\john.ansa
1. Create new employee:
Employee created successfully.
2. All Employees:
Employee{emp_id=111, name='Zaineh', salary=100000, address_id=1, dept_id=1}
Employee{emp_id=112, name='Yasmeen', salary=160000, address_id=2, dept_id=4}
Employee{emp_id=113, name='Mira', salary=140000, address_id=3, dept_id=3}
Employee{emp_id=114, name='Shimaa', salary=200000, address_id=4, dept_id=2}
Employee{emp_id=115, name='Dean', salary=150000, address_id=5, dept_id=1}
Employee{emp_id=116, name='John Ansa', salary=500000, address_id=1, dept_id=1}
3. Find Employee with ID 116:
Employee{emp_id=116, name='John Ansa', salary=500000, address_id=1, dept_id=1}
4. Update employee:
Employee updated successfully.
5. After Update:
Employee{emp_id=116, name='John Ansa', salary=130000, address_id=1, dept_id=1}
5. Delete employee:
Employee deleted successfully.
All Employees after deletion:
Employee{emp_id=111, name='Zaineh', salary=100000, address_id=1, dept_id=1}
Employee{emp_id=112, name='Yasmeen', salary=160000, address_id=2, dept_id=4}
Employee{emp_id=113, name='Mira', salary=140000, address_id=3, dept_id=3}
Employee{emp_id=114, name='Shimaa', salary=200000, address_id=4, dept_id=2}
Employee{emp_id=115, name='Dean', salary=150000, address_id=5, dept_id=1}
Process finished with exit code 0

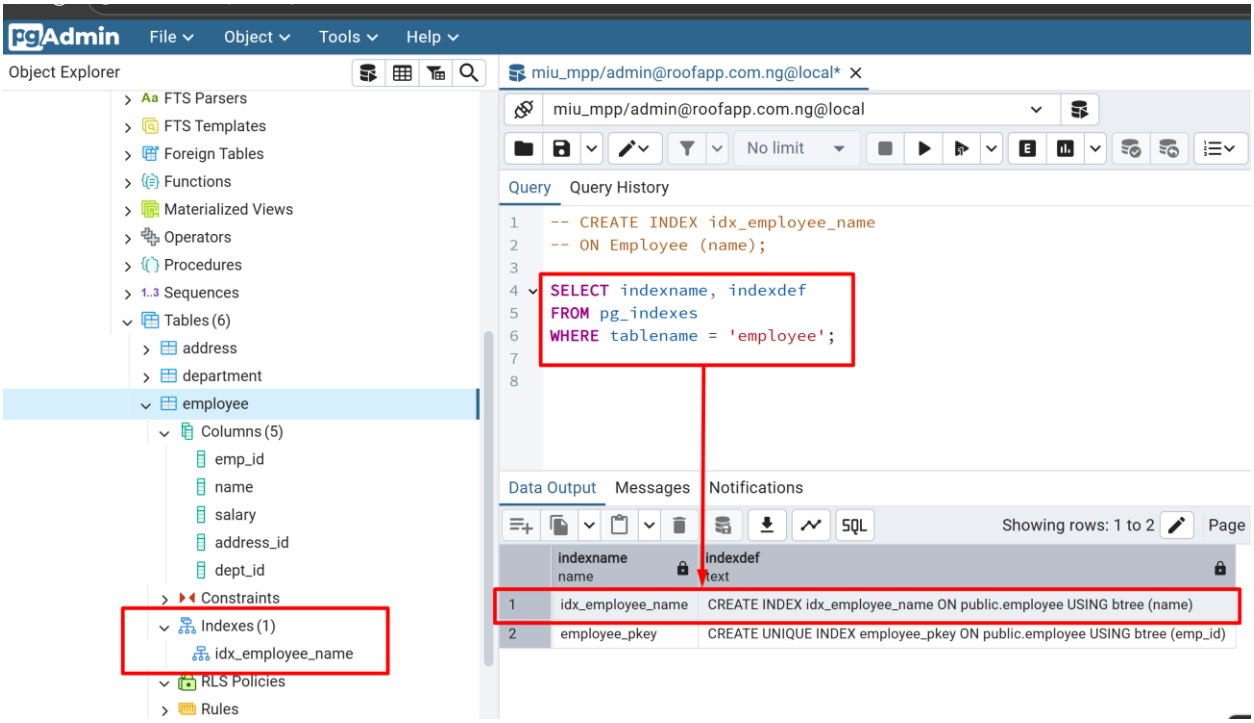
Employee Table:



EmployeeDetails View:



idx_employee_name


pgAdmin
File
Object
Tools
Help
Object Explorer
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (6)
address
department
employee
Columns (5)
emp_id
name
salary
address_id
dept_id
Constraints
Indexes (1)
idx_employee_name
RLS Policies
Rules
miu_mpp/admin@roofapp.com.ng@local*
miu_mpp/admin@roofapp.com.ng@local
No limit
Query
Query History
-- CREATE INDEX idx_employee_name
-- ON Employee (name);
SELECT indexname, indexdef
FROM pg_indexes
WHERE tablename = 'employee';
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 2
Page
indexname
name
indexdef
text
1
idx_employee_name
CREATE INDEX idx_employee_name ON public.employee USING btree (name)
2
employee_pkey
CREATE UNIQUE INDEX employee_pkey ON public.employee USING btree (emp_id)