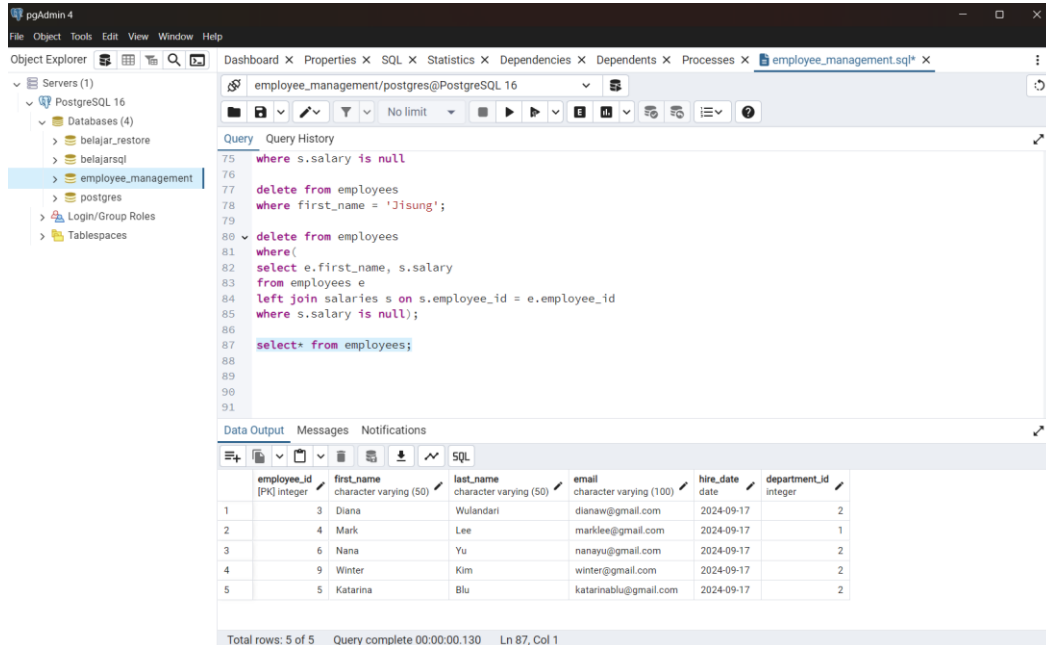


# Dokumentasi Mini Project Employee Management

## 1. Tampilan db employee\_management



The screenshot shows the pgAdmin 4 interface. The left pane displays the database structure for PostgreSQL 16, with the 'employee\_management' database selected. The right pane shows a SQL query and its results. The query is as follows:

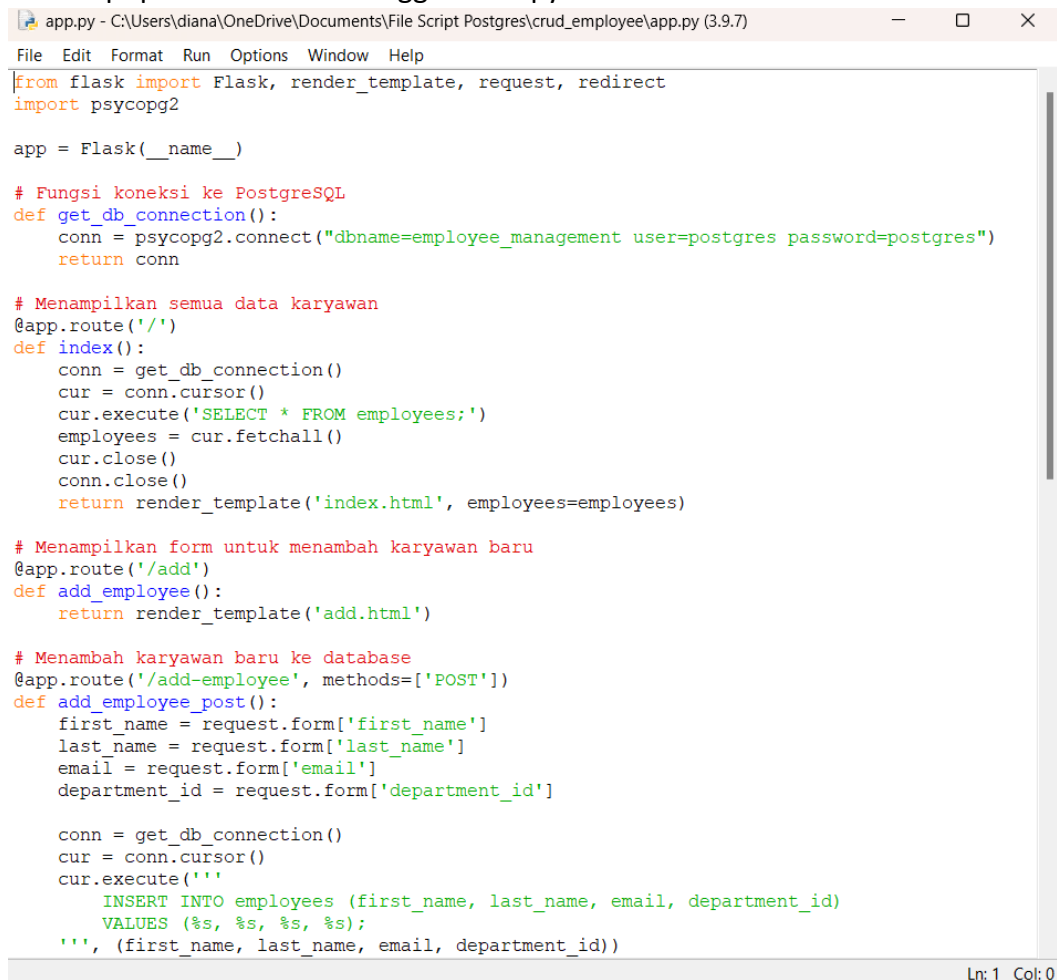
```
75 where s.salary is null
76
77 delete from employees
78 where first_name = 'Jisung';
79
80 delete from employees
81 where(
82 select e.first_name, s.salary
83 from employees e
84 left join salaries s on s.employee_id = e.employee_id
85 where s.salary is null);
86
87 select* from employees;
88
89
90
91
```

The 'Data Output' pane shows the following table:

employee_id	first_name	last_name	email	hire_date	department_id
1	Diana	Wulandari	dianaw@gmail.com	2024-09-17	2
2	Mark	Lee	marklee@gmail.com	2024-09-17	1
3	Nana	Yu	nanayu@gmail.com	2024-09-17	2
4	Winter	Kim	winter@gmail.com	2024-09-17	2
5	Katarina	Blu	katarinablu@gmail.com	2024-09-17	2

Total rows: 5 of 5 Query complete 00:00:00.130 Ln 87, Col 1

## 2. File script perintah CRUD menggunakan python



The screenshot shows a Python script named 'app.py' in a text editor. The script uses Flask for web routing and psycopg2 for database connectivity. The code is as follows:

```
app.py - C:\Users\diana\OneDrive\Documents\File Script Postgres\crud_employee\app.py (3.9.7)
File Edit Format Run Options Window Help

from flask import Flask, render_template, request, redirect
import psycopg2

app = Flask(__name__)

# Fungsi koneksi ke PostgreSQL
def get_db_connection():
    conn = psycopg2.connect("dbname=employee_management user=postgres password=postgres")
    return conn

# Menampilkan semua data karyawan
@app.route('/')
def index():
    conn = get_db_connection()
    cur = conn.cursor()
    cur.execute('SELECT * FROM employees;')
    employees = cur.fetchall()
    cur.close()
    conn.close()
    return render_template('index.html', employees=employees)

# Menampilkan form untuk menambah karyawan baru
@app.route('/add')
def add_employee():
    return render_template('add.html')

# Menambah karyawan baru ke database
@app.route('/add-employee', methods=['POST'])
def add_employee_post():
    first_name = request.form['first_name']
    last_name = request.form['last_name']
    email = request.form['email']
    department_id = request.form['department_id']

    conn = get_db_connection()
    cur = conn.cursor()
    cur.execute('''
        INSERT INTO employees (first_name, last_name, email, department_id)
        VALUES (%s, %s, %s, %s);
    ''', (first_name, last_name, email, department_id))
```

Ln: 1 Col: 0

```
*IDLE Shell 3.9.7*
File Edit Shell Debug Options Window Help
Python 3.9.7 (default, Sep 16 2021, 16:59:28) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\diana\OneDrive\Documents\File Script Postgres\crud_employee\app.py
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Restarting with watchdog (windowsapi)
```

### 3. Tampilan web

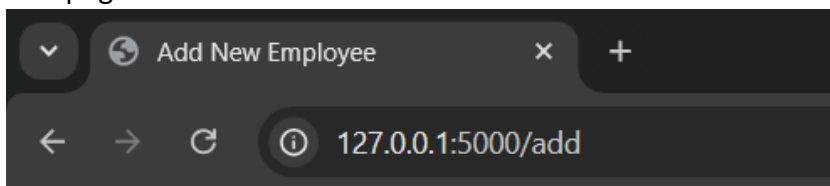


## Employee Management

[Add New Employee](#)

First Name	Last Name	Email	Hire Date	Department ID	Actions
Diana	Wulandari	dianaw@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Mark	Lee	marklee@gmail.com	2024-09-17	1	<a href="#">Edit</a> <a href="#">Delete</a>
Nana	Yu	nanayu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Winter	Kim	winter@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Ning	Yizhou	ningyi@gmail.com	2024-09-17	3	<a href="#">Edit</a> <a href="#">Delete</a>
Katarina	Blu	katarinablu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>

### 4. Add pegawai baru



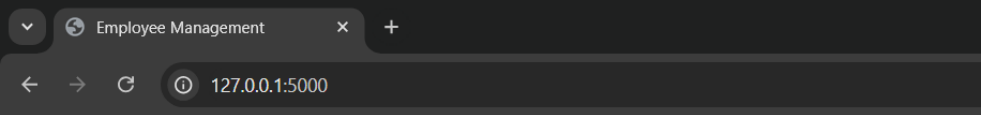
## Add New Employee

First Name:

Last Name:

Email:

Department ID:

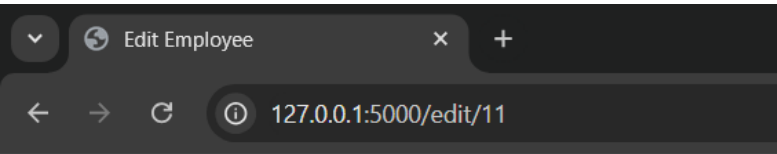


# Employeeesss Management

[Add New Employee](#)

First Name	Last Name	Email	Hire Date	Department ID	Actions
Diana	Wulandari	dianaw@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Mark	Lee	marklee@gmail.com	2024-09-17	1	<a href="#">Edit</a> <a href="#">Delete</a>
Nana	Yu	nanayu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Winter	Kim	winter@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Katarina	Blu	katarinablu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Ning	Yizhou	ningyi@gmail.com	2024-09-17	1	<a href="#">Edit</a> <a href="#">Delete</a>

5. Update Data pegawai Ning Yizhou, mengubah departemen ID



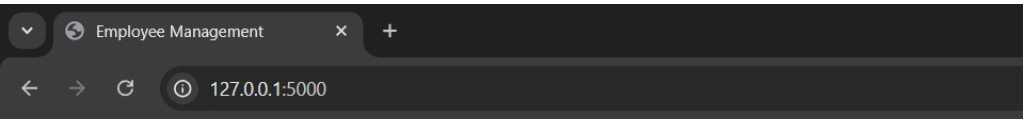
# Edit Employee

First Name:

Last Name:

Email:

Department ID:



# Employeeesss Management

[Add New Employee](#)

First Name	Last Name	Email	Hire Date	Department ID	Actions
Diana	Wulandari	dianaw@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Mark	Lee	marklee@gmail.com	2024-09-17	1	<a href="#">Edit</a> <a href="#">Delete</a>
Nana	Yu	nanayu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Winter	Kim	winter@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Katarina	Blu	katarinablu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Ning	Yizhou	ningyizhou@gmail.com	2024-09-17	3	<a href="#">Edit</a> <a href="#">Delete</a>

## 6. Delete Data pegawai Ning Yizhou

Employee Management

127.0.0.1:5000

### Employee Management

[Add New Employee](#)

First Name	Last Name	Email	Hire Date	Department	
Diana	Wulandari	dianaw@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Mark	Lee	marklee@gmail.com	2024-09-17	1	<a href="#">Edit</a> <a href="#">Delete</a>
Nana	Yu	nanayu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Winter	Kim	winter@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Katarina	Blu	katarinablu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Ning	Yizhou	ningyizhou@gmail.com	2024-09-17	3	<a href="#">Edit</a> <a href="#">Delete</a>

127.0.0.1:5000 says  
Hapus Data?  

OKCancel

Employee Management

127.0.0.1:5000

### Employee Management

[Add New Employee](#)

First Name	Last Name	Email	Hire Date	Department ID	Actions
Diana	Wulandari	dianaw@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Mark	Lee	marklee@gmail.com	2024-09-17	1	<a href="#">Edit</a> <a href="#">Delete</a>
Nana	Yu	nanayu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Winter	Kim	winter@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>
Katarina	Blu	katarinablu@gmail.com	2024-09-17	2	<a href="#">Edit</a> <a href="#">Delete</a>

## 7. Dokumentasi terminal

```
C:\Users\diana\anaconda3\Sc x + v
127.0.0.1 - - [17/Sep/2024 19:34:21] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:34:22] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:34:26] "GET /add HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:44] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:45] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:45] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:45] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:54] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:55] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:55] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:59] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:35:59] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:36:10] "GET /add HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:36:58] "POST /add-employee HTTP/1.1" 302 -
127.0.0.1 - - [17/Sep/2024 19:36:58] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:37:05] "GET /edit/5 HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:37:14] "POST /update-employee/5 HTTP/1.1" 302 -
127.0.0.1 - - [17/Sep/2024 19:37:14] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:48:24] "GET /add HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:49:09] "GET /delete/10 HTTP/1.1" 302 -
127.0.0.1 - - [17/Sep/2024 19:49:09] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:49:12] "GET /add HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:49:37] "POST /add-employee HTTP/1.1" 302 -
127.0.0.1 - - [17/Sep/2024 19:49:37] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:49:53] "GET /edit/11 HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:50:23] "POST /update-employee/11 HTTP/1.1" 302 -
127.0.0.1 - - [17/Sep/2024 19:50:23] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [17/Sep/2024 19:50:59] "GET /delete/11 HTTP/1.1" 302 -
127.0.0.1 - - [17/Sep/2024 19:50:59] "GET / HTTP/1.1" 200 -
```