

BASIS DATA LANJUT

TUGAS 11



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PROGRAM STUDI SISTEM INFORMASI BISNIS

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

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1. Salary_stats

The screenshot shows a web browser window with multiple tabs open. The active tab displays a table titled "Statistik Gaji" showing average salaries for five departments: IT, Finance, Marketing, Operations, and HR. The table includes columns for department, average salary, minimum salary, and maximum salary.

Departemen	Gaji Rata-rata	Gaji Terendah	Gaji Tertinggi
IT	Rp 9.228.571	Rp 7.800.000	Rp 15.000.000
Finance	Rp 7.650.000	Rp 7.200.000	Rp 8.200.000
Marketing	Rp 6.533.333	Rp 5.800.000	Rp 7.000.000
Operations	Rp 8.100.000	Rp 6.000.000	Rp 11.000.000
HR	Rp 7.400.000	Rp 6.200.000	Rp 9.500.000

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2. Tenure_stats

The screenshot shows a web browser window with multiple tabs open. The active tab displays a table titled "Masa Kerja" showing the count of employees at three levels: Intermediate, Senior, and Junior.

Level	Jumlah
Intermediate	6
Senior	13
Junior	1

3. Employee_overview

4. Function get_employees_by_salary_range(min_salary DECIMAL, max_salary DECIMAL)

```

-- 1) get_employees_by_salary_range
CREATE OR REPLACE FUNCTION get_employees_by_salary_range(min_salary DECIMAL, max_salary DECIMAL)
RETURNS TABLE(
    id INT,
    full_name TEXT,
    department TEXT,
    "position" TEXT,
    salary NUMERIC
)
AS $$ 
SELECT
    id,
    CONCAT(first_name, ' ', last_name) AS full_name,
    department,
    position,
    salary
FROM employees
WHERE salary BETWEEN min_salary AND max_salary
ORDER BY salary DESC, id;
$$ language sql;

```

5. Function get_department_summary()

pgAdmin 4

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Object Explorer

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belajar

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FTS Parsers

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Foreign Tables

Functions

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Operators

Procedures

Query History

```
177 -- 2) get_department_summary
178 CREATE OR REPLACE FUNCTION get_department_summary()
179 RETURNS TABLE(
180   department TEXT,
181   employee_count BIGINT,
182   avg_salary NUMERIC,
183   total_budget NUMERIC
184 )
185 AS $$
186   SELECT
187     department,
188     COUNT(*) AS employee_count,
189     ROUND(AVG(salary)::numeric, 2) AS avg_salary,
190     SUM(salary)::numeric AS total_budget
191   FROM employees
192   GROUP BY department
193   ORDER BY department;
194 $$
195 LANGUAGE sql;
196
197 SELECT * FROM get_department_summary();
198
199
200
```

Data Output Messages Notifications

CREATE FUNCTION

Query returned successfully in 38 msec.

Total rows: Query complete 00:00:00.038 CRLF Ln 192, Col 19