Use ai\_jobs;

Select \* from ai\_job\_dataset;

-- QUERY 1: Basic salary statistics

-- Purpose: Get overall salary information

SELECT COUNT(\*) as total\_jobs,

AVG(salary\_usd) as average\_salary,

MIN(salary\_usd) as minimum\_salary,

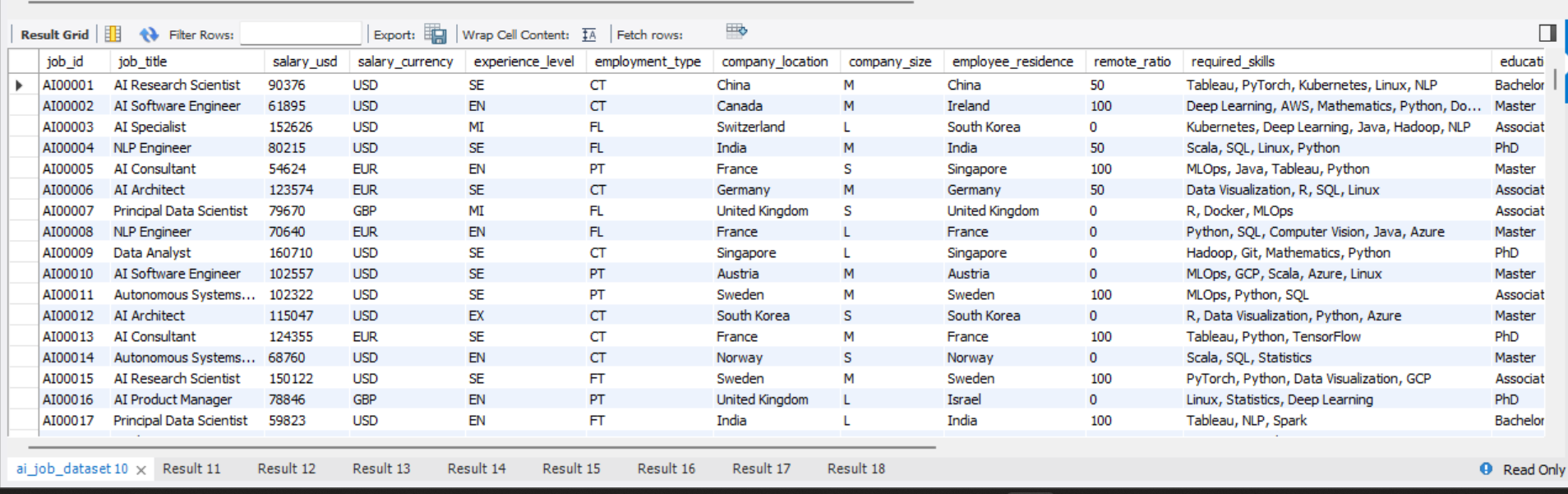
MAX(salary\_usd) as maximum\_salary

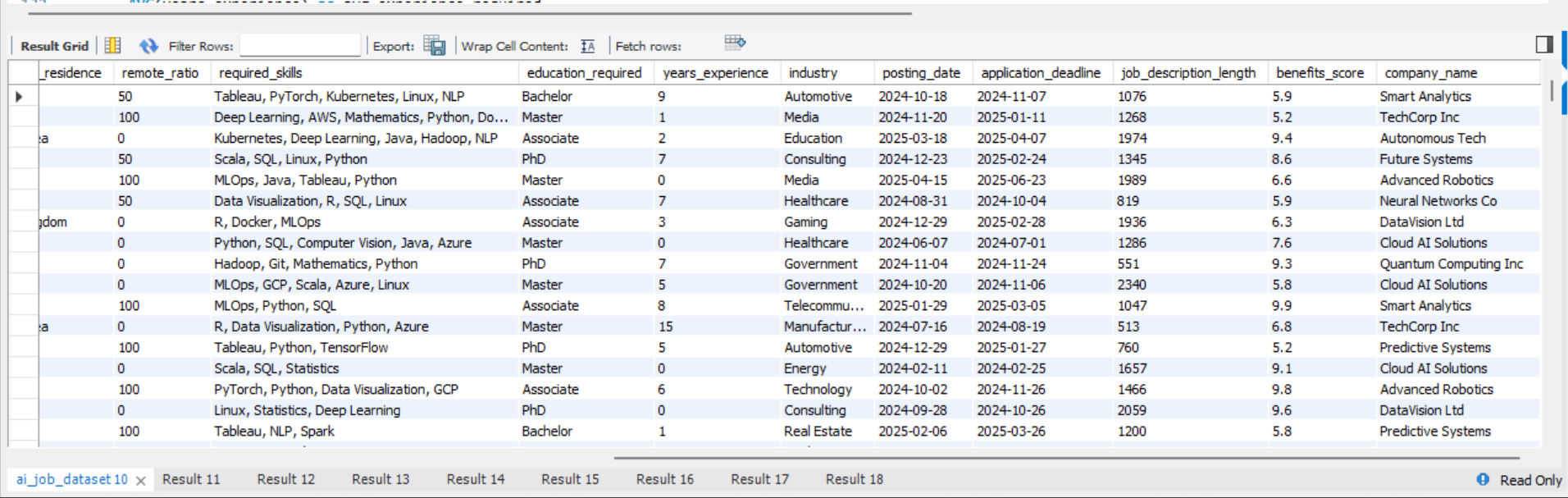
FROM ai\_job\_dataset

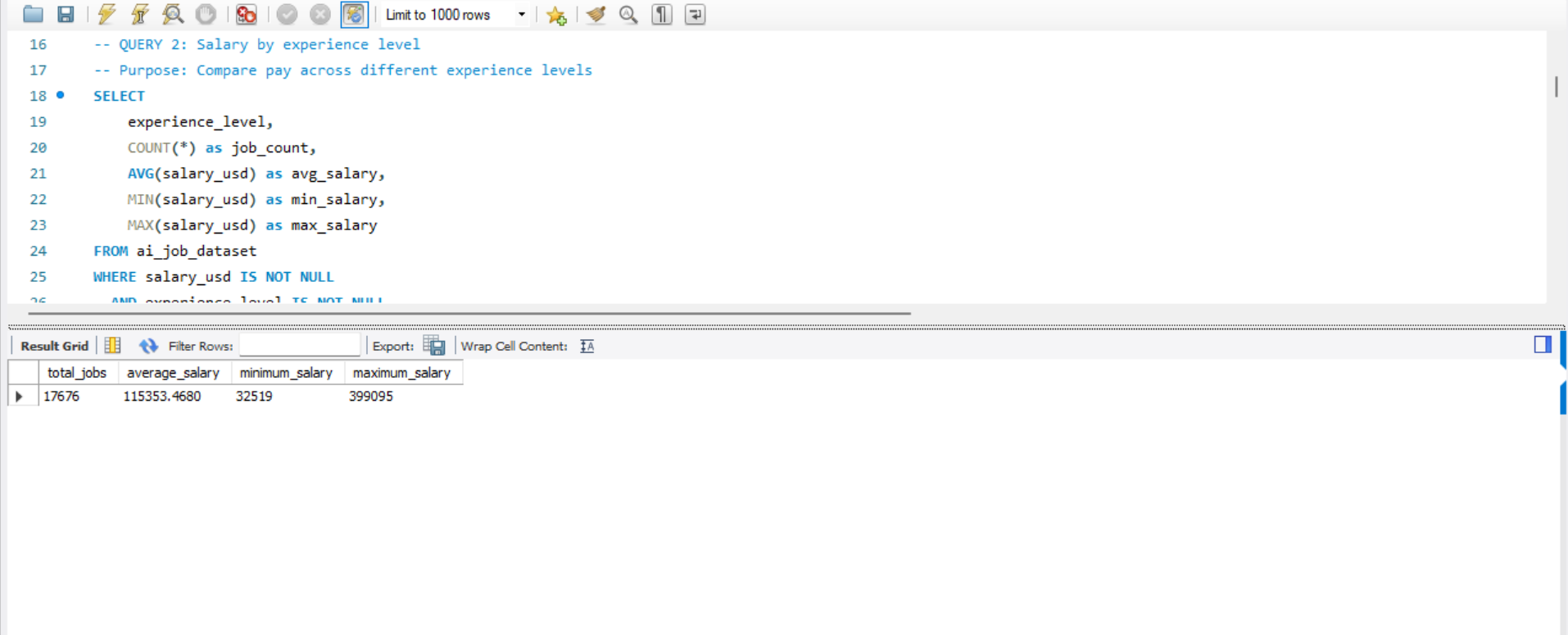
WHERE salary\_usd IS NOT NULL;

-- What this shows: Overall job market statistics

-- Why useful: Gives context for individual salaries







-- QUERY 2: Salary by experience level

-- Purpose: Compare pay across different experience levels

SELECT

experience\_level,

COUNT(\*) as job\_count,

AVG(salary\_usd) as avg\_salary,

MIN(salary\_usd) as min\_salary,

MAX(salary\_usd) as max\_salary

FROM ai\_job\_dataset

WHERE salary\_usd IS NOT NULL

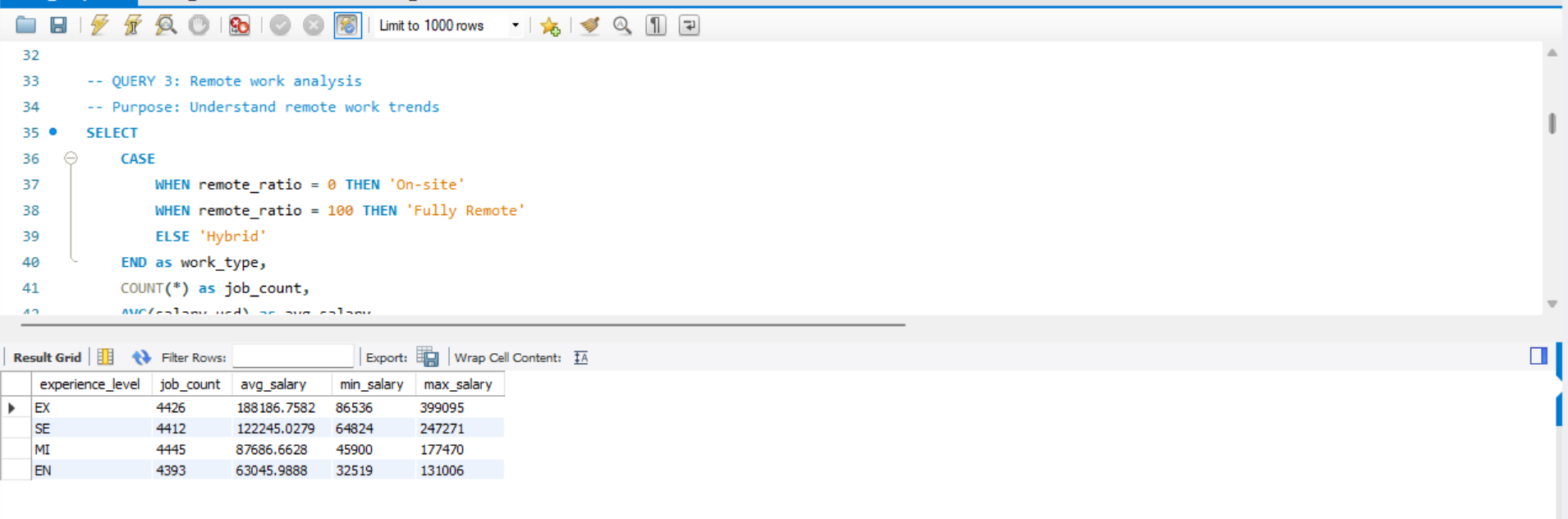
AND experience\_level IS NOT NULL

GROUP BY experience\_level

ORDER BY avg\_salary DESC;

-- What this shows: How experience affects salary

-- Why useful: Helps job seekers understand career progression



-- QUERY 3: Remote work analysis

-- Purpose: Understand remote work trends

SELECT

CASE

WHEN remote\_ratio = 0 THEN 'On-site'

WHEN remote\_ratio = 100 THEN 'Fully Remote'

ELSE 'Hybrid'

END as work\_type,

COUNT(\*) as job\_count,

AVG(salary\_usd) as avg\_salary,

ROUND(COUNT(\*) \* 100.0 / (SELECT COUNT(\*) FROM ai\_job\_dataset), 2) as percentage

FROM ai\_job\_dataset

WHERE remote\_ratio IS NOT NULL

GROUP BY

CASE

WHEN remote\_ratio = 0 THEN 'On-site'

WHEN remote\_ratio = 100 THEN 'Fully Remote'

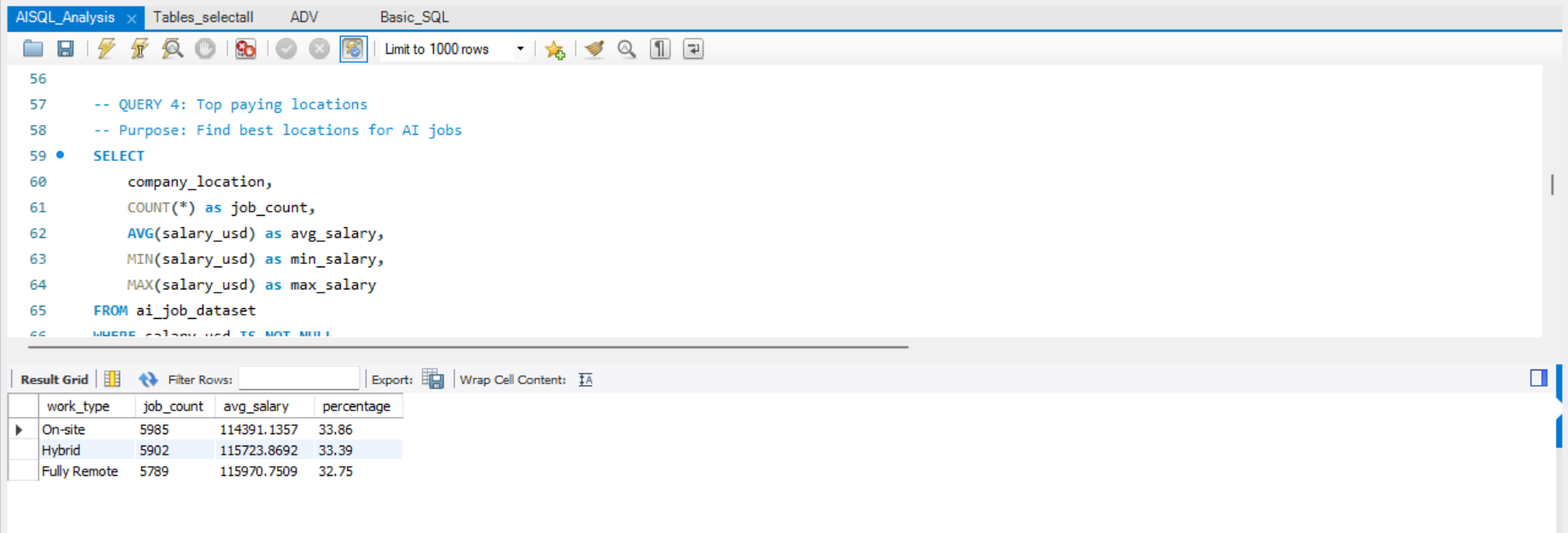
ELSE 'Hybrid'

END

ORDER BY job\_count DESC;

-- What this shows: Remote work distribution and pay impact

-- Why useful: Shows if remote work affects salary



-- QUERY 4: Top paying locations

-- Purpose: Find best locations for AI jobs

SELECT

company\_location,

COUNT(\*) as job\_count,

AVG(salary\_usd) as avg\_salary,

MIN(salary\_usd) as min\_salary,

MAX(salary\_usd) as max\_salary

FROM ai\_job\_dataset

WHERE salary\_usd IS NOT NULL

AND company\_location IS NOT NULL

GROUP BY company\_location

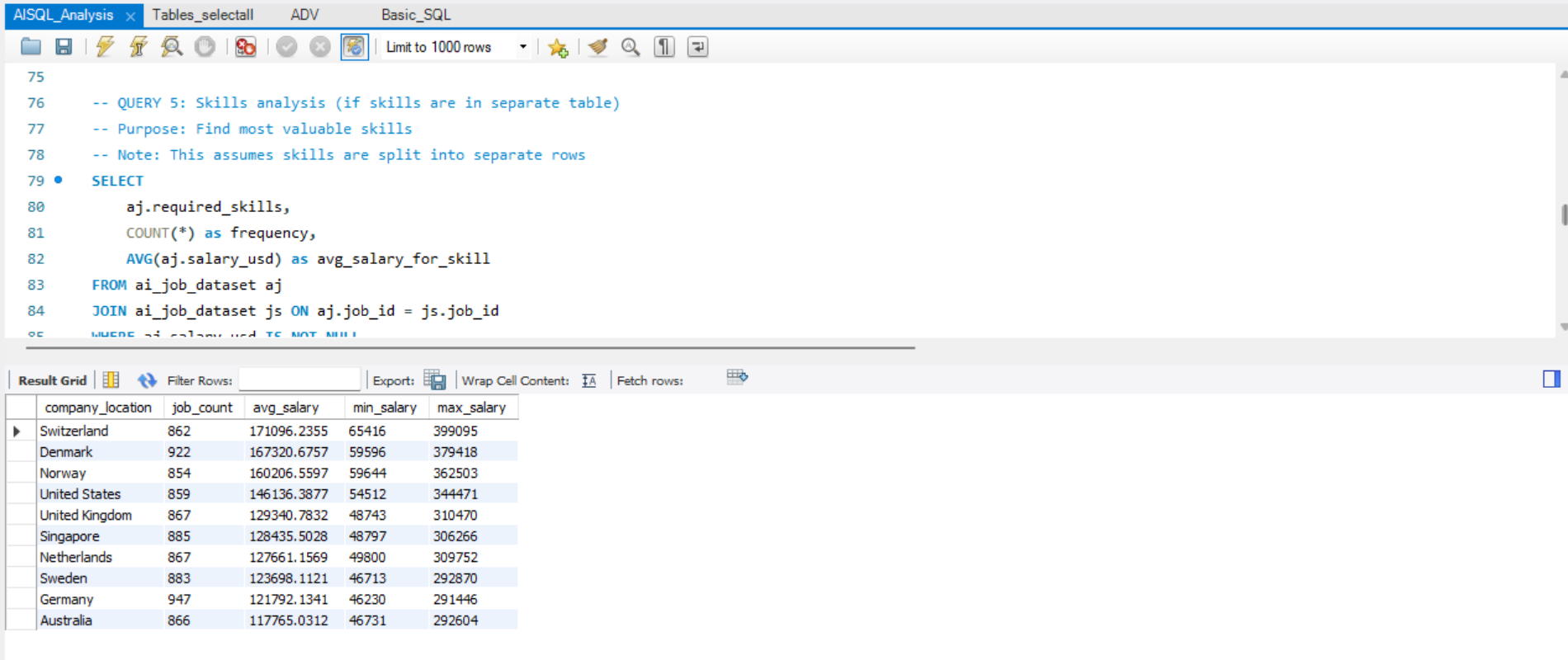
HAVING COUNT(\*) >= 5 -- Only locations with at least 5 jobs

ORDER BY avg\_salary DESC

LIMIT 10;

-- What this shows: Which locations pay the most

-- Why useful: Helps with job search and relocation decisions



-- QUERY 5: Skills analysis (if skills are in separate table)

-- Purpose: Find most valuable skills

-- Note: This assumes skills are split into separate rows

SELECT

aj.required\_skills,

COUNT(\*) as frequency,

AVG(aj.salary\_usd) as avg\_salary\_for\_skill

FROM ai\_job\_dataset aj

JOIN ai\_job\_dataset js ON aj.job\_id = js.job\_id

WHERE aj.salary\_usd IS NOT NULL

GROUP BY aj.required\_skills

HAVING COUNT(\*) >= 10 -- Skills mentioned in at least 10 jobs

ORDER BY avg\_salary\_for\_skill DESC

LIMIT 15;

-- What this shows: Which skills pay the most

-- Why useful: Guides learning and skill development

-- QUERY 6: Company size impact

-- Purpose: See how company size affects salary and remote work

SELECT

company\_size,

COUNT(\*) as job\_count,

AVG(salary\_usd) as avg\_salary,

AVG(remote\_ratio) as avg\_remote\_ratio,

COUNT(CASE WHEN remote\_ratio = 100 THEN 1 END) as fully\_remote\_count

FROM ai\_job\_dataset

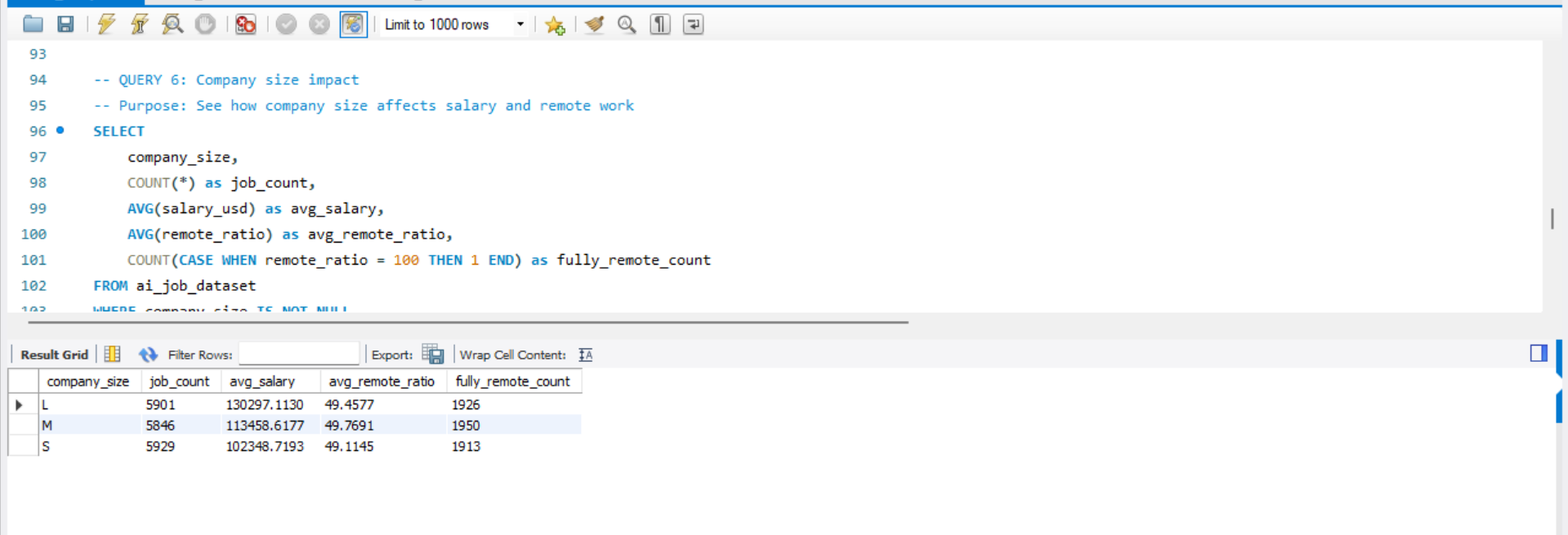
WHERE company\_size IS NOT NULL

GROUP BY company\_size

ORDER BY avg\_salary DESC;

-- What this shows: How company size affects pay and remote work

-- Why useful: Helps choose between startup vs large company



-- QUERY 7: Trending over time

-- Purpose: See how the job market is changing

SELECT

YEAR(posting\_date) as posting\_year,

MONTH(posting\_date) as posting\_month,

COUNT(\*) as jobs\_posted,

AVG(salary\_usd) as avg\_salary,

AVG(remote\_ratio) as avg\_remote\_ratio

FROM ai\_job\_dataset

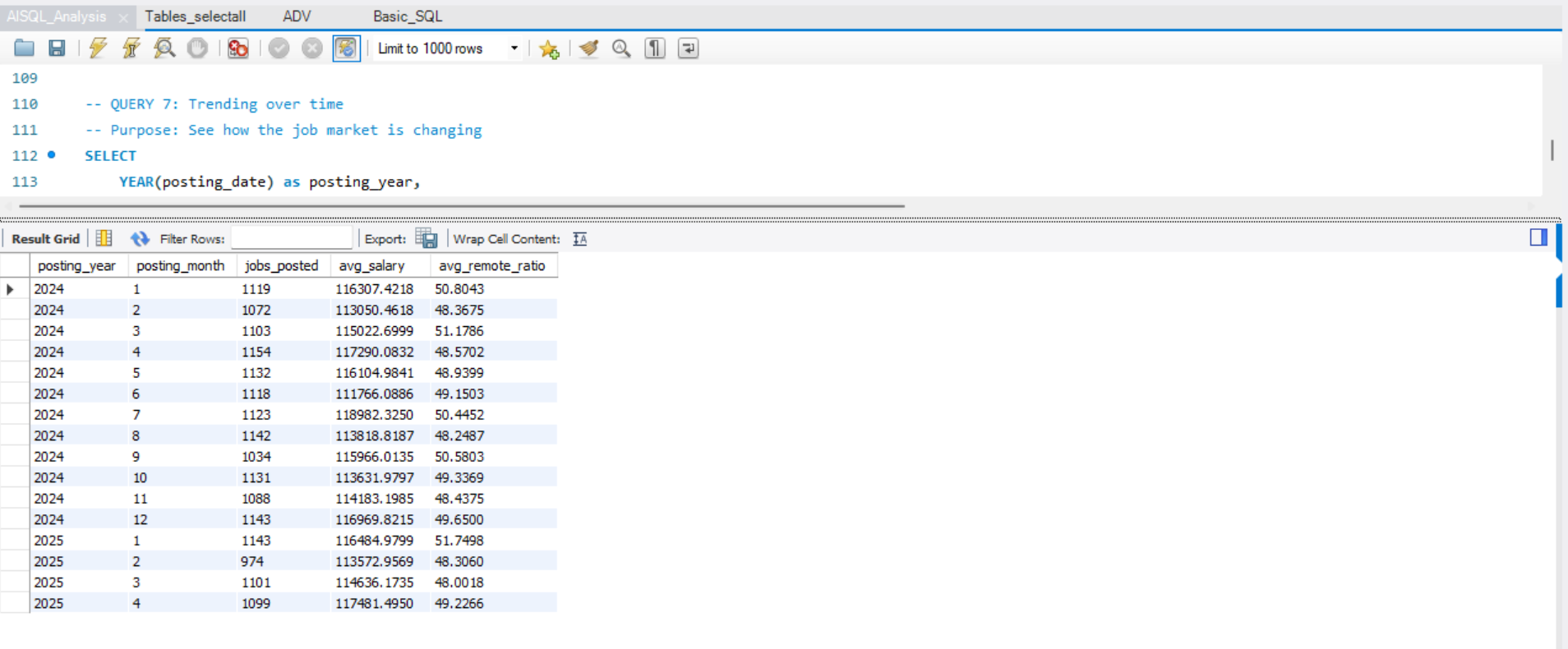
WHERE posting\_date >= '2022-01-01' -- Last few years

GROUP BY YEAR(posting\_date), MONTH(posting\_date)

ORDER BY posting\_year, posting\_month;

-- What this shows: Job market trends over time

-- Why useful: Shows if market is growing and salary trends



-- QUERY 8: Education requirements vs salary

-- Purpose: See if education affects pay

SELECT

education\_required,

COUNT(\*) as job\_count,

AVG(salary\_usd) as avg\_salary,

AVG(years\_experience) as avg\_experience\_required

FROM ai\_job\_dataset

WHERE education\_required IS NOT NULL

AND salary\_usd IS NOT NULL

GROUP BY education\_required

ORDER BY avg\_salary DESC;

-- What this shows: How education level affects salary

-- Why useful: Helps understand if advanced degrees are worth it

