

## Data Analyst Challenge

### SQL Test Prompt – First Call Resolution

You are given a schema with these simplified tables:

```
customer (customer_id PK, ...)
operator (operator_id PK, ...)
call (call_id PK, customer_id FK, operator_id FK, created_at TIMESTAMP, direction TEXT)
```

#### Definition:

- We say a call has achieved **first call resolution (FCR)** if the same customer does not place another call within 7 days after that call.
- If the customer makes another call within 7 days, then the issue is considered unresolved.

#### Task:

Write a SQL query that returns, for a given date range:

- `operator_id`
- total number of calls received by this operator
- number of first-call resolutions (FCR) by this operator
- percentage of calls handled by this operator that were FCR

#### Notes:

- Consider only inbound calls.
- Output should be aggregated at the operator level.
- Aim for clarity and correctness in your query.

