SQL □□□□□ API □□

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SQL ARCHITECTURE API OPINION

IS SQL A HIGH-LEVEL API?

Declarative, standardized, optimized — the oldest API in software

ARGUMENTS FOR

- Unified data access (SELECT/INSERT/UPDATE/DELETE)
- Built-in query optimization (cost-based)
- Granular GRANT/REVOKE access control
- ISO standard — 40+ years of standardization

ARGUMENTS AGAINST

- Requires expertise for complex queries
- SQL injection risks if misused
- No rate limiting, versioning, pagination
- Schema coupling — consumers need to know structure

VERDICT: Yes, SQL is a high-level API

Best as internal API (backend↔DB) with REST/GraphQL as external API

SQL: the oldest, most powerful, most underestimated API in software

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```
GRANT SELECT (product_name, price) ON catalog.products TO 'api_user'@'%';
```

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