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# Database SQL vs. noSQL, stored procs & Redis noSQL demo

Collected & presented by Al Curry 4-12-2018

All code in [github.com/AlCurry/dbpresents](https://github.com/AlCurry/dbpresents)

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# What we'll cover

- ❑ explain & demo simple mySQL Stored Procedures
- ❑ some stats about SQL and noSQL databases
- ❑ a basic Redis noSQL DB app using Node will be presented
- ❑ installation instructions for Redis DB, client & server, and the app

# Stored procedures

- ❑ SQL databases, including mySQL, support them
- ❑ 3 step to use:
  1. Write
  2. load to database
  3. execute, possibly with parameters
- ❑ *May be lengthy (20 pages) & deceptively complex*
- ❑ Tricky to debug
- ❑ START TRANSACTION / COMMIT / ROLLBACK
- ❑ Examples

## Stored procedure demo - bamazon

Reference links:

- ❑ <https://dev.mysql.com/doc/refman/5.7/en/create-procedure.html>
- ❑ <http://www.mysqltutorial.org/mysql-nodejs/call-stored-procedures/>
- ❑ <https://www.sitepoint.com/using-node-mysql-javascript-client/>
- ❑ <http://www.mysqltutorial.org/stored-procedures-parameters.aspx>

In code, at least for mySQL & Oracle, “call <stored\_procedure\_name>” indicates a stored proc will be executed - see examples in repo, like execProc1

## Job counts by popular databases

	Dice	LinkedIn
MongoDb	1300	8800
Cassandra	1000	6800
Redis	550	4200
couchDB	60	400
RethinkDb	4	47
mySQL	2700	19000
oracle	8800	54000
postgresql	875	5700
Sybase	400	2400

# Most popular Databases

Oracle

MySQL

Microsoft SQL Server

PostgreSQL

MongoDB

DB2

Microsoft Access

Cassandra

Elasticsearch

<https://www.improgrammer.net/top-10-databases-should-learn-2015/> - despite page name, published in February 2018

<https://www.improgrammer.net/most-popular-nosql-database/>

<https://db-engines.com/en/>

# Redis noSQL DB - app demo

- ❑ According to data cited earlier, Redis is 3rd most popular noSQL db, often ranked most-popular key-value database.
- ❑ Data in virtual memory, therefore very fast
- ❑ App manages users. Code is in github repo.
- ❑ Key screen shots there.
- ❑ Installation procedures detailed in README file.

<https://en.wikipedia.org/wiki/Redis>