



THA1 to THA4

Divided As

Topics	Links	Resources
<u>Postgresql and Redis</u>	https://gist.github.com/gokulsaraswat/bcd2a343e1ae74ac2a8cc7d7f6920987	https://www.postgresql.org/about/ https://www.postgresqltutorial.com/ https://redis.io/documentation
<u>Rest and Node.js</u>	<u>learn add will be created</u>	https://restfulapi.net/ https://nodejs.org/en/docs/ https://nodejs.dev/learn/introduction-to-nodejs https://www.w3schools.com/nodejs/
<u>DNS server</u>	<u>learn add will be created</u>	https://www.cloudflare.com/en-in/learning/dns/what-is-dns/ https://aws.amazon.com/route53/what-is-dns/
<u>Untitled</u>		

DB == Drives & Schemas == Folders `create schema {schemaName};`

Commands

Description	Code
<u>Create a Schema:</u>	<code>create table {schemaName}.{tableName};</code>
<u>List all tables in a Schema:</u>	<code>\d {schemaName}.*;</code>
<u>Create a table in a Schema:</u>	<code>\d {schemaName}.{tableName};</code>
<u>View a specific table:</u>	<code>drop schema {schemaName};</code>
<u>Drop Schema: If(empty Schema):</u>	<code>drop schema {schemaName} cascade;</code>
<u>View a table's content:</u>	<code>select * from {tablename};</code>

A schema is a collection of database objects, (tables).

Tables in schema are objects.

Aggregate Functions: Used to compute a single result from a set of input values

To count the number of rows in a table: `select count(*) from {tablename};`

Where clause: `select {column} from {tableName} where {conditons...};`

- LIKE works with strings only. So we need to type cast data types accordingly.
For type casting, use `::`

Redis PubSub or [1] To simulate a chat application using PUB_SUB,

- > Create a Database on Cloud (For now Upstash will get the work done)
- > Connect to the database via **Redis**
- > Publish a channel on that database and Subscribe to it as well to see the published messages.

Another ⇒

- open two window linux server WSL
- Type in redis-cli to check if it is working
- Go to upstash to make a redis cli : <https://console.upstash.com/pages/>
- Create a redis database and connect both the sides
- Copy the command which is given in the upstash website, it'll look like : `redis-cli -u redis://bdf23be171a4f9eafb8be42a7ed9f1a@usw1-neutral-lynx-31383.upstash.io:31383`
- Then simply write: SUBSCRIBE devnest
- Then write to chat: PUBLISH devsnest message

Rest can be better understood by watching and implementing simultaneously from youtube or documentation

Rest and Node

For normal package transfer in APIs, TCP/IP is used i.e., for transporting data.

For live video streaming and voice calls RTP is used.

For web access http/https is used.

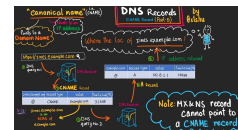
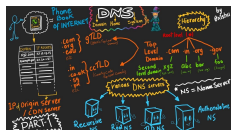
Types of APIs other than REST are: SOAP and JSON RPC and XML RPC





If a website is using REST API, its data will always be in JSON format.

<https://stoplight.io/api-types/>

Some Snapshots for DNS Server



some more links

 Topic	 Links
<u>To learn more</u>	https://www.ibm.com/in-en/cloud/learn