Cheatography

compsci exam Cheat Sheet

by kaiman via cheatography.com/208299/cs/44584/

Docker FIle

FROM	Create a new build stage from a base image.
RUN	Execute build commands.
COPY	Copy files and directories.
COPY	Specify default commands.

MySQL

SELECT	Extracts data from database
UPDATE	Updates data in a database
DELETE	deletes data from a database
INSERT INTO	inserts new data into a database
CREATE DATABASE	Creates a new database
ALTER DATABASE	Modifies a database
CREATE TABLE	Creates a new Table
*DROP TABLE	Deletes a table
CREATE INDEX	Creates a search key
DROP INDEX	Deletes search key
ORDER BY	List by a certain column, DESC or ASC, etc.
DISTINCT	Filter only unique inputs
WHERE	Filter function (SELECT * FROM Customers WHERE Country='Mexico')

HTTP

GET	Fetch the resource from web
PUT	Update the resource
POST	Create a resource to send to web
DELETE	Delete resource from web

Memory Resources

Caching Heiarchy	CPU Registers, L1, L2, L3, RAM, SSD/HDD, Cloud
FIFO	First In First Out, Evict Oldest Entry
LRU	Least Recently Used, Evict the entry that has been used longest ago. Move hits to front
Transposing	Column by Column, faster than row by row for long arrays.
FS(File System)	Caches data in the RAM. Uses memory and avoids storage reads.
Stale Data	Old files are deleted from the cache. SSD is large, so freshness more important than space there.
PyArrow	Cache Friendly table layout. Saves time when handling large datasets by turning each value into Pyarrow Types.

Compute Resources

Locks	Making a code execute on only one thread. Avoids discrepancies from other threads changing vals.
Threading.lock()	class threading.Lock The class implementing primitive lock objects. Once a thread has acquired a lock, subsequent attempts to acquire it block, until it is released; any thread may release it. Changed in version 3.13: Lock is now a class. In earlier Pythons, Lock was a factory function which returned an instance of the underlying private lock type.
lock.acquire()	Acquire a lock, blocking or non-blocking. Locks code under lock to one thread.
lock.release()	Release a lock. This can be called from any thread, not only the thread which has acquired the lock.
GIL	Global Interpreter Lock.

By **kaiman**
cheatography.com/kaiman/

Not published yet.
Last updated 10th October, 2024.