

REDIS cheatsheet [v2.0]

starting the server

```
cd redis; ./redis-server
```

running the client

```
./redis-cli <command>  
(or with no command, to enter interactive mode)
```

commands

generic commands for all types

exists <i>key</i>	Test if specified key exists. Return: 1 if exists, 0 if not
del <i>key1 key2 ... keyN</i>	Remove the specified keys. Return: integer > 0 if keys removed, 0 if none of the keys existed
type <i>key</i>	Return the type of the value stored at key, as a string. Return: "none", "string", "list", "set"
keys <i>pattern</i>	Return all keys matching pattern. Ex: keys h*!lo, keys h?!lo, keys h[aeo]!lo Return: bulk reply string with keys separated by spaces
randomkey	Return a randomly-selected key from the current database. Return: the selected key, or empty string if database is empty
rename <i>oldkey newkey</i> renamenx <i>oldkey newkey</i>	Atomically renames key. renamenx fails if <i>newkey</i> exists and returns 0. Return: 1 if OK, 0 if <i>oldkey</i> doesn't exist or if it equals <i>newkey</i>
dbsize	Returns the number of keys in the current database. Return: integer, the number of keys
expire <i>key seconds</i> expireat <i>key unixtime</i>	Sets timeout on the specified key. Return: 1 if timeout set, 0 if key already has a timeout or doesn't exist
ttl <i>key</i>	Returns remaining time to live, in seconds, for a key with EXPIRE set. Return: integer number of seconds, or -1 if key doesn't exist or has no expiration
select <i>db-index</i>	Selects a database by index (zero-based). Default database is 0. Return: 1 if OK, 0 if error
move <i>key db-index</i>	Moves a key from current database to specified database. Return: 1 if OK, 0 if key doesn't exist or is already present in the target database

commands for strings

set <i>key value</i> setnx <i>key value</i>	Sets the value of key to the string value; setnx will not overwrite an existing value. Return: 1 if OK, 0 if error
get <i>key</i>	Gets the value of key. Return: string value if OK, "nil" if key does not exist
getset <i>key value</i>	Atomically sets the value of key to the string value and returns old value of key. Return: value of key prior to the new value being set ("nil" if key did not exist)
mget <i>key1 key2 ... keyN</i>	Gets the values of all specified keys. Return: multi-bulk reply of all values, with "nil" for any keys that do not exist
mset <i>key1 value1 ... keyN valueN</i> msetnx <i>key1 value1 ... keyN valueN</i>	Sets the values of the keys to the string values; msetnx will not overwrite existing values if any key exists. Return: 1 if all keys were set, 0 if none were set
incr <i>key</i> decr <i>key</i>	Increments/decrements value of key by 1. Return: New value after increment/decrement operation
incrby <i>key integer</i> decrby <i>key integer</i>	Increments/decrements value of key by the integer value specified. Return: New value after increment/decrement operation

transactions

multi <command1> ... <commandn> exec or discard	Performs set of commands within a transaction, in a single step. Either all or none of the commands will be processed. exec will cause the commands to be processed; discard will abandon all of the commands. Return: exec returns multi bulk reply with the return value of each command discard returns OK
---	--

REDIS cheatsheet page 2

commands operating on lists

rpush <i>key string</i> lpush <i>key string</i>	Adds the string to the head (rpush) or tail (lpush) of the list at key. Return: 1 if exists, 0 if key exists but is not a list
llen <i>key</i>	Returns the length of the list at key. Return: integer length, or error if key is not a list
lrange <i>key start end</i>	Returns the elements of list at key, zero-based. Negative numbers are offset from the end of the list. Return: requested elements or empty list if no match
ltrim <i>key start end</i>	Trims list at key to contain only the specified elements. Return: 1 if OK, error if key is not a list
lindex <i>key index</i>	Returns the element at the specified index of the list key. Return: the requested item; empty string if no such element; error if key isn't a list
lset <i>key index value</i>	Sets the element of list key at index to the specified value. Return: 1 if OK, error if index out of range or key isn't a list
lrem <i>key count value</i>	Removes count number of items from the list that have the specified value. Count 0 will remove all; negative count starts from the end. Return: # items removed
lpop <i>key string</i> rpop <i>key string</i>	Atomically removes and returns the first (lpop) or last (rpop) element from list key. Return: the element, or "nil" if empty/nonexistent list; error if key isn't a list
blpop <i>key1...keyN timeout</i> brpop <i>key1...keyN timeout</i>	Blocking pop, returns when a specified list contains an element. Return: key and popped value, or "nil" if operation times out
rpoplpush <i>srckey destkey</i>	Atomically returns last element from srckey and pushes as first element to destkey. Return: element popped/pushed, or "nil" if srckey empty or nonexistent

commands operating on sets

sadd <i>key member</i>	Adds member to the set stored at key. Return: 1 if OK, 0 if element was already a set member; error if key isn't a set
srem <i>key member</i>	Removes member from set key. Return: 1 if OK, 0 element not a set member; error if key isn't a set
spop <i>key</i> srandmember <i>key</i>	Returns random element from set key. spop will remove the element. Return: element, or nil object if key is empty or doesn't exist
smove <i>srckey dstkey member</i>	Atomically moves member from set srckey to set dstkey. Return: 1 if OK, 0 if element not found in srckey; error if either key isn't a set
scard <i>key</i>	Returns the number of elements in set key. Return: integer number of elements; 0 if empty or key doesn't exist
sismember <i>key member</i>	Return whether member is in set key. Return: 1 if element is a member, 0 if not or if key doesn't exist
sinter <i>key1 key2...keyN</i> sinterstore <i>dstkey key1...keyN</i>	Returns the members resulting from intersection of sets specified. sinterstore will store results in new set and return status code.
sunion <i>key1 key2...keyN</i> sunionstore <i>dstkey key1...keyN</i>	Returns the members resulting from union of sets specified. sunionstore will store results in new set and return status code.
sdiff <i>key1 key2...keyN</i> sdiffstore <i>dstkey key1...keyN</i>	Returns the members resulting from the difference between the first set and the rest. sdiffstore will store results in new set and return status code.
smembers <i>key</i>	Returns all of the members of set key. This is sinter, for only one set. Return: the members

sort *key [by pattern] [limit start count] [get pattern] [asc|desc] [alpha] [store dstkey]*

Sorts the elements in the list, set, or sorted set at key. Default sort is numeric, ascending. Specifying **asc** or **desc** will sort in ascending or descending order. Specifying **alpha** will sort alphabetically. **limit** will return count number of elements beginning at offset start (zero-based). **store** will put the results of the sort into a list with key dstkey.

Specifying "**by pattern**" will sort using the values at keys generated using the pattern. For example, if the list/set being sorted contains the values 1, 2, 3 then "sort by weight_*" will sort using the values at keys "weight_1", "weight_2", "weight_3".

Specifying "**get pattern**" will retrieve the values stored at keys generated using the pattern. For example, "get items_*" will return the values at keys items_1, items_2, items_3 if the list/set being sorted contains the values 1, 2, 3.

commands operating on sorted sets

zadd <i>key score member</i>	Adds member to zset key, with specified score. Return: 1 if added, 0 if element was already a member and score was updated
zrem <i>key member</i>	Removes member from zset key. Return: 1 if removed, 0 if element was not a member
zincrby <i>key incr member</i>	Increments score of member by <i>incr</i> and updates element's position in zset. Return: integer, the new score of member after the increment
zrank <i>key member</i> zrevrank <i>key member</i>	Returns the rank of the member in the sorted set, zero-based; returns nil if member doesn't exist. zrevrank returns the rank in high-to-low order.
zrange <i>key start end</i> zrevrange <i>key start end</i>	Returns elements in zset key within the specified index range, sorted in order (or reverse with zrevrange). Option: "withscores" will also return scores.
zrangebyscore <i>key min max</i> [<i>limit offset count</i>] [<i>withscores</i>]	Returns elements in zset key with scores within the specified range. Option "withscores" will also return scores with the elements.
zremrangebyrank <i>key start end</i>	Removes elements from zset key with rank between start and end. Negative numbers will start from the end. Return: integer, number of elements removed
zremrangebyscore <i>key min max</i>	Removes elements from zset key with scores between min and max. Return: integer, number of elements removed
zcard <i>key</i>	Returns the number of elements in the zset key. Return: integer, the number of elements; returns 0 if key doesn't exist
zscore <i>key element</i>	Returns the score of the specified element in zset key. Return: the score, as a string; or "nil" if key or element don't exist
zunion/zinter <i>dstkey N k1...kN</i> [<i>weights w1...wN</i>] [<i>aggregate sum min max</i>]	Creates union or intersection of N sorted sets named by keys <i>k1...kN</i> , and stores it in key <i>dstkey</i> . The number of input keys, N, must be specified. The weights option will multiply the scores by the provided weights. The aggregate option changes how the scores are aggregated into the new set. Returns the number of elements in the new set at <i>dstkey</i> .

zsets available in redis 1.1 and later. zrank, zrevrank, zrangebyscore [withscores], zremrangebyrank in redis 1.3.4. zunion/zinter in redis 1.3.5.

commands operating on hashes

hset <i>key field value</i> hsetnx <i>key field value</i>	Sets hash <i>field</i> to the <i>value</i> . Will create a new hash if key does not exist. hsetnx will do nothing if field already exists. Return: 1 if new field was created, 0 if existing field was updated or already exists
hget <i>key field</i>	Returns value of <i>field</i> stored in hash key. Return: value of <i>field</i> , or nil if <i>field</i> or key do not exist
hmset <i>key field1 value1 .. fieldN valueN</i>	Sets fields to the values provided, replacing existing values if any. Creates new hash if none exists at key.
hincrby <i>key field value</i>	Increments value in field. Negative values will decrement. If field does not exist or holds a string, will reset to zero first. Return: the new value of field
hexists <i>key field</i>	Returns 1 if <i>field</i> exists in hash at key. Returns 0 if key or <i>field</i> don't exist.
hdel <i>key field</i>	Removes <i>field</i> from hash stored at key. Return: 1 if field removed, 0 if field was not present
hlen <i>key</i>	Returns the number of fields in hash stored at key, or 0 if key does not exist.
hkeys <i>key</i> hvals <i>key</i>	Returns the keys or values of the hash stored at key.
hgetall <i>key</i>	Returns the keys and values of the hash stored at key, as a multi bulk reply in the form <i>field1, value1, ..., fieldN, valueN</i> .

hash commands available in redis 1.3.10.

publish / subscribe commands

subscribe <i>channel1 ... channelN</i>	Subscribes the client to the specified channels.
psubscribe <i>pattern1 ... patternN</i>	Subscribes the client to any channels matching the specified patterns.
unsubscribe <i>[channel1 ... channelN]</i>	Unsubscribes the client from the specified channels, or from all channels if no channels are specified. Returns a message for each unsubscribed channel, and the number of channels still subscribed to.
punsubscribe <i>[pattern1 ... patternN]</i>	Unsubscribes the client from channels matching the specified patterns, or from all channels if no patterns are specified. Returns a message for each unsubscribed channel, and the number of channels still subscribed to.
publish <i>channel message</i>	Sends a message that will be received by all clients subscribed to the specified channel. Returns the number of clients that received the message.
When a message is received by a client, the message type will be <i>message</i> or <i>pmessage</i> to indicate how the client is subscribed to the originating channel. If <i>pmessage</i> , the pattern matched will be provided. For both, the originating channel and the message are then provided.	

publish/subscribe commands in redis 1.3.8.

persistence and control commands

save	Saves all databases to disk. Connection requests will not be served during the save. Returns OK when complete.
bgsave	Saves all databases to disk in the background. Redis forks and writes so the parent process continues to process connection requests.
lastsave	Returns integer unix time of last successful save. This can be used following a bgsave to check if it was successful.
bgrewriteaof	Rewrites the Append Only File in the background.
shutdown	Stops all clients, saves databases, and quits.
info	Returns information and statistics about the server.
monitor	Used to view commands for debugging. Telnet to redis server then enter monitor command. Enter quit to end the session.
slaveof <i>host port</i> slaveof <i>no one</i>	Makes server the replication slave of the redis server at <i>host/port</i> . The "no one" form turns off replication, making the server a master.
quit	Tells server to close the connection immediately.
auth <i>password</i>	Authorizes client using the provided password, if redis server is configured with <i>requirepass</i> . Returns OK or error if <i>password</i> is incorrect.
flushdb	Deletes all keys in the currently-selected database. Return: 1 -- this command never fails
flushall	Deletes all keys in all existing databases. Return: 1 -- this command never fails

redis site: <http://code.google.com/p/redis/>

mailing list: <http://groups.google.com/group/redis-db>