

Redis - Sets

Redis Sets are an unordered collection of unique strings. Unique means sets does not allow repetition of data in a key.

In Redis set add, remove, and test for the existence of members in $O(1)$ (constant time regardless of the number of elements contained inside the Set). The maximum length of a list is $2^{32} - 1$ elements (4294967295, more than 4 billion of elements per set).

Example

```
redis 127.0.0.1:6379> SADD tutorials redis
(integer) 1
redis 127.0.0.1:6379> SADD tutorials mongodb
(integer) 1
redis 127.0.0.1:6379> SADD tutorials mysql
(integer) 1
redis 127.0.0.1:6379> SADD tutorials mysql
(integer) 0
redis 127.0.0.1:6379> SMEMBERS tutorials
1) "mysql"
2) "mongodb"
3) "redis"
```

In the above example, three values are inserted in Redis set named 'tutorials' by the command **SADD**.

Redis Sets Commands

Following table lists some basic commands related to sets.

| Sr.No | Command & Description |
|-------|--|
| 1 | SADD key member1 [member2] Adds one or more members to a set |
| 2 | SCARD key Gets the number of members in a set |



| | |
|----|--|
| 3 | SDIFF key1 [key2] Subtracts multiple sets |
| 4 | SDIFFSTORE destination key1 [key2] Subtracts multiple sets and stores the resulting set in a key |
| 5 | SINTER key1 [key2] Intersects multiple sets |
| 6 | SINTERSTORE destination key1 [key2] Intersects multiple sets and stores the resulting set in a key |
| 7 | SISMEMBER key member Determines if a given value is a member of a set |
| 8 | SMEMBERS key Gets all the members in a set |
| 9 | SMOVE source destination member Moves a member from one set to another |
| 10 | SPOP key Removes and returns a random member from a set |
| 11 | SRANDMEMBER key [count] Gets one or multiple random members from a set |
| 12 | SREM key member1 [member2] Removes one or more members from a set |
| 13 | SUNION key1 [key2] Adds multiple sets |
| 14 | SUNIONSTORE destination key1 [key2] Adds multiple sets and stores the resulting set in a key |
| 15 | SSCAN key cursor [MATCH pattern] [COUNT count] Incrementally iterates set elements |