Sheet - Redis: Insert and Retrieve Different Data Types

1. Strings

Insert:

SET username "Suhel Khan"

```
127.0.0.1:6379> SET username "Suhel Khan"
OK
```

SET age 25

```
127.0.0.1:6379> SET age 25
OK
```

Retrieve:

GET username

```
127.0.0.1:6379> get username
"Suhel Khan"
```

GET age

```
127.0.0.1:6379> get age
"25"
```

Increment / Decrement:

INCR age

DECR age

```
127.0.0.1:6379> INCR age
(integer) 26
127.0.0.1:6379> DECR age
(integer) 25
```

2. Lists

Insert:

LPUSH skills "Python"

LPUSH skills "Django"

RPUSH skills "Redis"

```
127.0.0.1:6379> LPUSH skills "Python"
(integer) 1
127.0.0.1:6379> LPUSH skills "Django"
(integer) 2
127.0.0.1:6379> LPUSH skills "Redis"
(integer) 3
```

Retrieve:

LRANGE skills 0 -1

```
127.0.0.1:6379> LRANGE skills 0 -1
1) "Redis"
2) "Django"
3) "Python"
```

Remove:

LPOP skills

RPOP skills

```
127.0.0.1:6379> LPOP skills
"Redis"
127.0.0.1:6379> RPOP skills
"Python"
```

3. Sets

Insert:

SADD courses "AI"

SADD courses "ML"

```
127.0.0.1:6379> SADD courses "AI"
(integer) 1
127.0.0.1:6379> SADD courses "ML"
(integer) 1
127.0.0.1:6379> SADD courses "AI"
(integer) 0
```

Retrieve:

SMEMBERS courses

```
127.0.0.1:6379> SMEMBERS courses
1) "AI"
2) "ML"
```

Check existence:

SISMEMBER courses "AI"

```
127.0.0.1:6379> SISMEMBER courses "AI"
(integer) 1
127.0.0.1:6379> SISMEMBER courses "AP"
(integer) 0
```

Remove:

SREM courses "ML"

```
127.0.0.1:6379> SREM courses "ML"
(integer) 1
```

4. Hashes

Insert:

HSET student name "Suhel Khan" course "MCA" year 2025

```
127.0.0.1:6379> HSET student name "Suhel" course "MCA" year 2025
(integer) 3
```

Retrieve single field:

HGET student name

Retrieve all fields:

HGETALL student

```
127.0.0.1:6379> HGET student age
(nil)
127.0.0.1:6379> HGET student year
"2025"
127.0.0.1:6379> HGETALL student
1) "name"
2) "Suhel"
3) "course"
4) "MCA"
5) "year"
6) "2025"
```

Keys or values:

HKEYS student

HVALS student

```
127.0.0.1:6379> HKEYS students
(empty array)
127.0.0.1:6379> HKEYS student
1) "name"
2) "course"
3) "year"
127.0.0.1:6379> HVALS student
1) "Suhel"
2) "MCA"
3) "2025"
```

5. Check Key Type

TYPE username

TYPE skills

TYPE courses

TYPE student

```
127.0.0.1:6379> TYPE username
string
127.0.0.1:6379> TYPE skills
list
127.0.0.1:6379> TYPE skills
list
127.0.0.1:6379> TYPE courses
set
127.0.0.1:6379> TYPE student
```

6. Delete Data

DEL username

DEL skills

DEL courses

DEL student

```
127.0.0.1:6379> DEL username
(integer) 1
127.0.0.1:6379> DEL skills
(integer) 1
127.0.0.1:6379> DEL courses
(integer) 1
127.0.0.1:6379> DEL student
(integer) 1
```

7. View All Keys

KEYS *

```
hash
127.0.0.1:6379> KEYS *
1) "student"
2) "username"
3) "skills"
4) "age"
5) "courses"
```