PG-DBDA September 2023
C-DAC THIRUVANANTHAPURAM

REDIS – LAB 2

1. Do the following in the Redis database numbered **5**.
   a) Create a hash key named **student** with fields stid, name, course.

   Ans:

   >HSET student stid 1001 name abc courses Math

```
prasad@prasad-VirtualBox:~$ redis-cli -n 5
127.0.0.1:6379[5]> HSET student stid 1001 name abc course Math
(integer) 3
```

   b) Add email and contactno fields to **student** key.

   Ans:

   >HSET student email abc@abc.com contactno 1234567890

```
127.0.0.1:6379[5]> HSET student email abc@abc.com contactno 1234567890
(integer) 2
```

   c) Display the number of fields stored in **student** key.

   Ans:

   >HLEN student

```
127.0.0.1:6379[5]> HLEN student
(integer) 5
127.0.0.1:6379[5]>
```

   d) Display the value of name field from **student** key.

   Ans:

   >HGET student name

```
127.0.0.1:6379[5]> HGET student name
"abc"
127.0.0.1:6379[5]>
```

   e) Modify the value of contactno field from **student** key.

   Ans:

   >HSET student contactno 9876543210

```
127.0.0.1:6379[5]> HSET student contactno 9876543210
(integer) 0
127.0.0.1:6379[5]>
```

f) Display only the values of all fields from **student** key.

Ans:

>HVALS student

```
127.0.0.1:6379[5]> HVALS student
1) "1001"
2) "abc"
3) "Math"
4) "abc@abc.com"
5) "9876543210"
127.0.0.1:6379[5]>
```

g) Create a list key named **courses** with values DBDA, DCSF, DAC, DESD.

Ans:

>LPUSH courses DBDA DCSF DAC DESD

```
127.0.0.1:6379[5]> LPUSH courses DBDA DCSF DAC DESD
(integer) 4
127.0.0.1:6379[5]>
```

h) Add a new value DMC to the right in **courses** key.

Ans:

>RPUSH courses DMC

```
127.0.0.1:6379[5]> RPUSH courses DMC
(integer) 5
127.0.0.1:6379[5]>
```

i) Insert a new value DRAT before DCSF in **courses** key.

Ans:

>LINSERT courses before DCSF DRAT

```
127.0.0.1:6379[5]> LINSERT courses before DCSF DRAT
(integer) 6
127.0.0.1:6379[5]>
```

j) Display the number of elements of **courses** key.

Ans:

>LLEN courses

```
127.0.0.1:6379[5]> LLEN courses
(integer) 6
127.0.0.1:6379[5]>
```

k) Display all the elements from **courses** key.

Ans:

>LRANGE courses 0 -1

```
127.0.0.1:6379[5]> LRANGE courses 0 -1
1) "DESD"
2) "DAC"
3) "DRAT"
4) "DCSF"
5) "DBDA"
6) "DM"
127.0.0.1:6379[5]>
```

l) Remove 2 elements from right of **courses** key.

Ans:

>RPOP courses 2

```
127.0.0.1:6379[5]> RPOP courses 2
1) "DM"
2) "DBDA"
127.0.0.1:6379[5]>
```

m) Create a set key named **centres** with values Trivandrum, Kochi, Mumbai, Pune.

Ans:

>SADD centres Trivendram Kochi Mumbai Pune

```
127.0.0.1:6379[5]> SADD centres Trivandrum Kochi Mumbai Pune
(integer) 4
127.0.0.1:6379[5]>
```

n) Display all the members from **centres** key.

Ans:

>SMEMBERS centres

```
127.0.0.1:6379[5]> SMEMBERS centres
1) "Trivandrum"
2) "Kochi"
3) "Mumbai"
4) "Pune"
```

o) Remove the member Kochi from **centres** key.

Ans:

>SREM centres Kochi

```
127.0.0.1:6379[5]> SREM centres Kochi
(integer) 1
127.0.0.1:6379[5]>
```

p) Create a sorted set key named **departments** with values STDC, CFS, CSS, ETG.

Ans:>ZADD departments 1 STDC 2 CFS 3 CSS 4 ETG

```
127.0.0.1:6379[5]> ZADD departments 1 STDC 2 CFS 3 CSS 4 ETG
(integer) 4
127.0.0.1:6379[5]>
```

q) Display all the members along with their score from **departments** key.

Ans:

>ZRANGE departments 0 -1 WITHSCORES

```
127.0.0.1:6379[5]> ZRANGE departments 0 -1 WITHSCORES
1) "STDC"
2) "1"
3) "CFS"
4) "2"
5) "CSS"
6) "3"
7) "ETG"
8) "4"
```

r) Remove ETG from **departments** key.

Ans:

>ZREM departments ETG

```
127.0.0.1:6379[5]> ZREM departments ETG
(integer) 1
127.0.0.1:6379[5]>
```

s) Display the members which contain the letter **S** from **departments** key.

Ans:

>ZSCAN departments 0 MATCH *S*

```
127.0.0.1:6379[5]> ZSCAN departments 0 MATCH *S*
1) "0"
2) 1) "STDC"
   2) "1"
   3) "CFS"
   4) "2"
   5) "CSS"
   6) "3"
```

t) Display the total number of keys present in the database.

Ans:

>DBSIZE

```
127.0.0.1:6379[5]> DBSIZE
(integer) 7
127.0.0.1:6379[5]>
```