

Redis

Part I (10 marks)

Task #1 (1 mark)

Add your name to the database keyed to your student ID.

HINTS: <http://redis.io/commands#string>

Task #2 (1 mark)

- Add a list of 5 databases we're going to cover in this course using "416" as the key, in the order they are covered in class.
- Trim MongoDB from the list using the LTRIM command then remove your least favorite

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Task 1

```
127.0.0.1:6379> SET 1211 mohamed
OK
```

```
muhammed@DESKTOP-DT81K5: x + v
27.0.0.1:6379> get 1211
mohamed"
27.0.0.1:6379> |
```

```
muhammed
127.0.0.1:6379> LPUSH 416 "PostgreSQL" "Redis" "SQLite" "Oracle" "MySQL"
(integer) 5
```

```
127.0.0.1:6379> LRANGE 416 0 -1
1) "MySQL"
2) "Oracle"
3) "SQLite"
4) "Redis"
5) "PostgreSQL"
127.0.0.1:6379> |
```

Task 2

```
127.0.0.1:6379> LREM 416 0 SQLite
(integer) 1
127.0.0.1:6379> LRANGE 416 -1
(error) ERR wrong number of arguments for 'lrange' command
127.0.0.1:6379> LRANGE 416 0 -1
1) "MySQL"
2) "Oracle"
3) "Redis"
4) "PostgreSQL"
127.0.0.1:6379> |
```

db from the list (You should now have a list of size 3)

HINTS: <http://redis.io/commands#list>

Task #3 (1 mark)

Make a new set called C that contains the common element in these 2 sets.

A: "a, b, c"

B: "c, d, e, f"

HINTS: <http://redis.io/commands#set>

Task #4 (1 mark)

- Create a sorted set of size 5 of your favorite databases then promote the third element in your list to becoming the top of your list.

- Retrieve your list along with the scores.

HINTS: http://redis.io/commands#sorted_set

Task #5 (1 mark)

- Create a hash table that stores a user profile with

- ID
- First Name
- Last Name
- birthday
- email

- Delete the email then return all values.

HINTS: <http://redis.io/commands#hash>

Task #6 (1 mark)

- Subscribe to the "COSC416A" channel

- Publish the message "Hello World" in the COSC416A channel

(Use 2 different Terminals or get a friend to send the message)

HINTS: <http://redis.io/commands#pubsub>

Task 3

```
127.0.0.1:6379> SADD A "a" "b" "c"
(integer) 3
127.0.0.1:6379> SADD B "c" "d" "e" "f"
(integer) 4
127.0.0.1:6379> SINTER C A B
(empty array)
127.0.0.1:6379> SINTERSTORE C A B
(integer) 1
127.0.0.1:6379> |
```

Task 4

```
muhammed@DESKTOP-DT81K5: X + v
127.0.0.1:6379> ZADD myDatabases 1 "db1" 2 "db2" 3 "db3" 4 "db4" 5 "db5"
(integer) 5
127.0.0.1:6379> ZADD myDatabases 0 "db3" 1 "db1" 2 "db2" 3 "db4" 4 "db5"
(integer) 0
127.0.0.1:6379> ZRANGE myDatabases 0 -1 WITHSCORES
1) "db3"
2) "0"
3) "db1"
4) "1"
5) "db2"
6) "2"
7) "db4"
8) "3"
9) "db5"
10) "4"
127.0.0.1:6379> |
```

Task 5

```
muhammed@DESKTOP-DT81K5: X + v
127.0.0.1:6379> HSET userProfile id 12345 firstName moahmed lastName ahmed birthday 1999-12-11 email muhamedabdlnagy@gmail.com
(integer) 5
127.0.0.1:6379> HDEL userProfile email
(integer) 1
127.0.0.1:6379> HGETALL userProfile
1) "id"
2) "12345"
3) "firstName"
4) "moahmed"
5) "lastName"
6) "ahmed"
7) "birthday"
8) "1999-12-11"
127.0.0.1:6379> |
```

Task 6

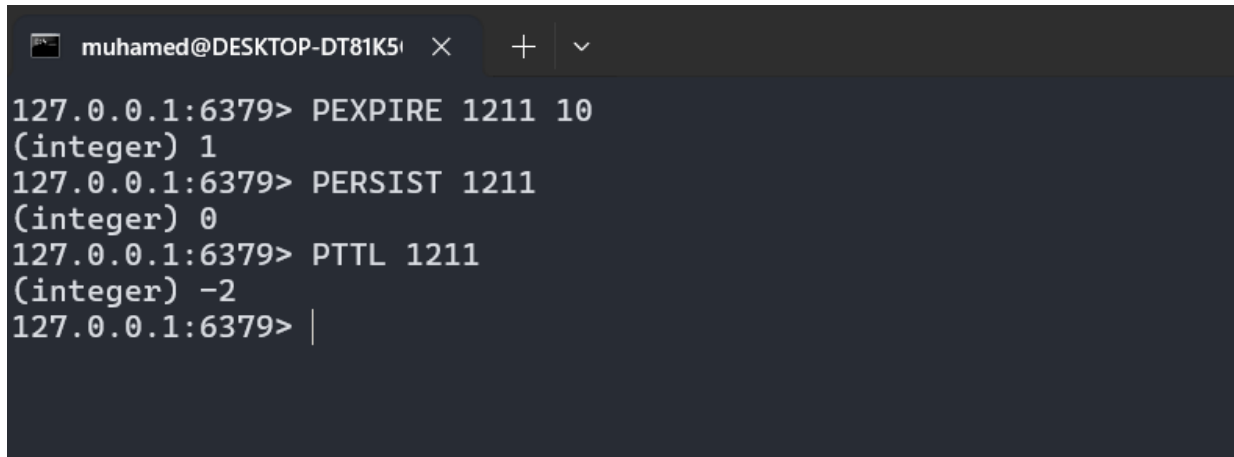
```
muhammed@DESKTOP-DT81K5Q:/mnt/c/Users/Lenovo$ redis-cli
127.0.0.1:6379> PUBLISH COSC416A "Hello World"
(integer) 1
127.0.0.1:6379> |
```

```
muhammed@DESKTOP-DT81K5Q  x  muhammed@DESKTOP-DT81K5C  x  +  v
127.0.0.1:6379> SUBSCRIBE COSC416A
Reading messages... (press Ctrl-C to quit)
1) "subscribe"
2) "COSC416A"
3) (integer) 1
1) "message"
2) "COSC416A"
3) "Hello World"
|
```

Task 7

```
muhammed@DESKTOP-DT81K5Q  x  +  v
127.0.0.1:6379> EXPIRE 12345 10
(integer) 0
127.0.0.1:6379> EXPIRE 1211 10
(integer) 1
127.0.0.1:6379> PERSIST 1211
(integer) 0
127.0.0.1:6379> |
```

Task 8



```
muhammed@DESKTOP-DT81K5: ~$ redis-cli
127.0.0.1:6379> PEXPIRE 1211 10
(integer) 1
127.0.0.1:6379> PERSIST 1211
(integer) 0
127.0.0.1:6379> PTTL 1211
(integer) -2
127.0.0.1:6379> |
```