Intro Redis Assignment

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NOTE: ALL THE COMMANDS WERE EXECUTED AS SPECIFIED IN THE REQUIREMENTS. NOT EVERY NUMBER HAS A SCREENSHOT BECAUSE I FELT MULTIPLE NUMBERS SHOULD BE CAPTURED IN "ONE SCREENSHOT" (LIKE THE VOTING ONES - YOU VOTE AND THEN YOU SHOW HOW MANY VOTES). ADDITIONALLY BY MOST ANSWERS THERE ARE TWO PICTURES THE FIRST ONE IS THE MONITOR SCREENSHOT AND THE SECOND ONE IS T=MY OWN OUTPUT. As far as I can tell everything worked exactly as it should have!

1 Reset the Redis server to "initial state" for your database

```
127.0.0.1:6379> flushdb
OK
127.0.0.1:6379> monitor
OK
```

2   Post the following articles in this order

(a) link: http://www.youtube.com, title: title195, user: Jane

(b) link: http://www.weibo.com, title: title53, user: Bob

(c) link: http://www.instagram.com, title: title3, user: Joel

(d) link: http://www.taobao.com, title13, user: Joel

(e) link: http://www.youtube.com, title: title50, user: Jane

3   As you post each of these articles, print the (augmented) "article state" to the terminal

```
mikeede11@LAPTOP-F8JUS0BM: /mnt/c/Users/mitch                                                    –  □  ×
1648808690.059797 [0 [::1]:47502] "GET" "nextID"
1648808690.062849 [0 [::1]:47502] "SET" "nextID" "0"
1648808690.078108 [0 [::1]:47502] "INCR" "nextID"
1648808690.087017 [0 [::1]:47502] "HMSET" "0" "now" "1648808689934000" "link" "http://www.youtube.com" "votes" "1" "id" "0" "title" "title195" "user"
"Jane"
1648808690.095797 [0 [::1]:47502] "ZADD" "ArticlesByScore" "1.648808690434E15" "0"
1648808690.097771 [0 [::1]:47502] "ZADD" "ArticlesByTime" "1.648808689934E15" "0"
1648808690.099412 [0 [::1]:47502] "SADD" "Jane" "0"
1648808690.100935 [0 [::1]:47502] "HGETALL" "0"
1648808690.102702 [0 [::1]:47502] "GET" "nextID"
1648808690.104049 [0 [::1]:47502] "INCR" "nextID"
1648808690.106568 [0 [::1]:47502] "HMSET" "1" "now" "1648808689974000" "link" "http://www.weibo.com" "votes" "1" "id" "1" "title" "title53" "user" "B
ob"
1648808690.107939 [0 [::1]:47502] "ZADD" "ArticlesByScore" "1.648808690474E15" "1"
1648808690.109064 [0 [::1]:47502] "ZADD" "ArticlesByTime" "1.648808689974E15" "1"
1648808690.110056 [0 [::1]:47502] "SADD" "Bob" "1"
1648808690.110856 [0 [::1]:47502] "HGETALL" "1"
1648808690.112128 [0 [::1]:47502] "GET" "nextID"
1648808690.113389 [0 [::1]:47502] "INCR" "nextID"
1648808690.114374 [0 [::1]:47502] "HMSET" "2" "now" "1648808689983000" "link" "http://www.instagram.com" "votes" "1" "id" "2" "title" "title3" "user"
"Joel"
1648808690.116005 [0 [::1]:47502] "ZADD" "ArticlesByScore" "1.648808690483E15" "2"
1648808690.117091 [0 [::1]:47502] "ZADD" "ArticlesByTime" "1.648808689983E15" "2"
1648808690.120955 [0 [::1]:47502] "SADD" "Joel" "2"
1648808690.121993 [0 [::1]:47502] "HGETALL" "2"
1648808690.123261 [0 [::1]:47502] "GET" "nextID"
1648808690.124188 [0 [::1]:47502] "INCR" "nextID"
1648808690.125565 [0 [::1]:47502] "HMSET" "3" "now" "1648808689994000" "link" "http://www.taobao.com" "votes" "1" "id" "3" "title" "title13" "user" "
Joel"
1648808690.126684 [0 [::1]:47502] "ZADD" "ArticlesByScore" "1.648808690494E15" "3"
1648808690.127799 [0 [::1]:47502] "ZADD" "ArticlesByTime" "1.648808689994E15" "3"
1648808690.128898 [0 [::1]:47502] "SADD" "Joel" "3"
1648808690.130131 [0 [::1]:47502] "HGETALL" "3"
1648808690.131541 [0 [::1]:47502] "GET" "nextID"
1648808690.132829 [0 [::1]:47502] "INCR" "nextID"
1648808690.134022 [0 [::1]:47502] "HMSET" "4" "now" "1648808690003000" "link" "http://www.youtube.com" "votes" "1" "id" "4" "title" "title50" "user"
"Jane"

{link=http://www.youtube.com, votes=1, id=0, title=title195, user=Jane, now=1648808689934000}
{link=http://www.weibo.com, votes=1, id=1, title=title53, user=Bob, now=1648808689974000}
{link=http://www.instagram.com, votes=1, id=2, title=title3, user=Joel, now=1648808689983000}
{link=http://www.taobao.com, votes=1, id=3, title=title13, user=Joel, now=1648808689994000}
{link=http://www.youtube.com, votes=1, id=4, title=title50, user=Jane, now=1648808690003000}
```

4 User Joel votes for the first article posted

5 Echo the current number of votes associated with that article

```
1648808690.141133 [0 [::1]:47502] "SISMEMBER" "Joel" "0"
1648808690.142746 [0 [::1]:47502] "HGET" "0" "now"
1648808690.145657 [0 [::1]:47502] "ZINCRBY" "ArticlesByScore" "500000.0" "0"
1648808690.147229 [0 [::1]:47502] "HINCRBY" "0" "votes" "1"
1648808690.148244 [0 [::1]:47502] "SADD" "Joel" "0"
```

```
Votes: 2
```

6 User Joel votes again for the first article posted

7 Echo the current number of votes associated with that article

```
1648808690.151642 [0 [::1]:47502] "SISMEMBER" "Joel" "0"
1648808690.152612 [0 [::1]:47502] "HGET" "0" "votes"
```

```
Vote Not Added - Votes: 2
```

8 User Xandra votes for the third article posted

9 Echo the current number of votes associated with that article

```
1648808690.154696 [0 [::1]:47502] "SISMEMBER" "Xandra" "2"
1648808690.155752 [0 [::1]:47502] "HGET" "2" "now"
1648808690.156788 [0 [::1]:47502] "ZINCRBY" "ArticlesByScore" "500000.0" "2"
1648808690.157766 [0 [::1]:47502] "HINCRBY" "2" "votes" "1"
1648808690.158791 [0 [::1]:47502] "SADD" "Xandra" "2"
1648808690.159700 [0 [::1]:47502] "HGET" "2" "votes"
```

```
Votes: 2
```

10 User Jane votes for the third article posted

11 Echo the current number of votes associated with that article

```
1648808690.161146 [0 [::1]:47502] "SISMEMBER" "Jane" "2"
1648808690.162153 [0 [::1]:47502] "HGET" "2" "now"
1648808690.163382 [0 [::1]:47502] "ZINCRBY" "ArticlesByScore" "500000.0" "2"
1648808690.164339 [0 [::1]:47502] "HINCRBY" "2" "votes" "1"
1648808690.165488 [0 [::1]:47502] "SADD" "Jane" "2"
1648808690.166290 [0 [::1]:47502] "HGET" "2" "votes"
```

```
Votes: 3
```

12 Invoke getArticlesByScore to retrieve the first page of articles, followed by printArticles for the result-set.

```
1648808690.168099 [0 [::1]:47502] "ZREVRANGEBYSCORE" "ArticlesByScore" "9.223372036854776E18" "0.0"
1648808690.169605 [0 [::1]:47502] "DEL" "MostRecentResult"
1648808690.171030 [0 [::1]:47502] "RPUSH" "MostRecentResult" "2" "0" "4"
1648808690.172094 [0 [::1]:47502] "LRANGE" "MostRecentResult" "0" "3"
1648808690.173185 [0 [::1]:47502] "HGETALL" "2"
1648808690.174371 [0 [::1]:47502] "HGETALL" "0"
1648808690.175552 [0 [::1]:47502] "HGETALL" "4"
```

```
{link=http://www.instagram.com, votes=3, id=2, title=title3, user=Joel, now=1648808689983000}
{link=http://www.youtube.com, votes=2, id=0, title=title195, user=Jane, now=1648808689934000}
{link=http://www.youtube.com, votes=1, id=4, title=title50, user=Jane, now=1648808690003000}
```

13 Invoke getArticlesByTime to retrieve the first page of articles, followed by printArticles for the result-set.

```
1648808690.176906 [0 [::1]:47502] "ZREVRANGEBYSCORE" "ArticlesByTime" "9.223372036854776E18" "0.0"
1648808690.180435 [0 [::1]:47502] "DEL" "MostRecentResult"
1648808690.182162 [0 [::1]:47502] "RPUSH" "MostRecentResult" "4" "3" "2"
1648808690.183631 [0 [::1]:47502] "LRANGE" "MostRecentResult" "0" "3"
1648808690.184668 [0 [::1]:47502] "HGETALL" "4"
1648808690.185954 [0 [::1]:47502] "HGETALL" "3"
1648808690.187385 [0 [::1]:47502] "HGETALL" "2"
```

```
{link=http://www.youtube.com, votes=1, id=4, title=title50, user=Jane, now=1648808690003000}
{link=http://www.taobao.com, votes=1, id=3, title=title13, user=Joel, now=1648808689994000}
{link=http://www.instagram.com, votes=3, id=2, title=title3, user=Joel, now=1648808689983000}
```

14 Your program should sleep for **TWENTIETH_MINUTE_IN_SECONDS** plus and additional 1000 milliseconds.

15 Echo to the terminal when your program goes to sleep and when it wakes up.

```
Going to sleep, good night :) zzz
Waking up, good morning :)
```

16   User Xandra votes for the second article posted

17   Echo the current number of votes associated with that article

```
1648808694.214755 [0 [::1]:47502] "SISMEMBER" "Xandra" "1"
1648808694.216152 [0 [::1]:47502] "HGET" "1" "now"
1648808694.217080 [0 [::1]:47502] "HGET" "1" "votes"
```
```
Vote Not Added - Votes: 1
```

18   Invoke addGroups to add the first article posted to the groups [cute-cats, os].

19   Invoke addGroups to add the second article posted to the groups [cute-cats].

20   Invoke addGroups to add the third article posted to the groups [os].

21   Invoke getGroupArticles to retrieve the first page of articles in the cute-cats group, followed by printArticles for the result-set.

```
1648808694.218343 [0 [::1]:47502] "ZSCORE" "ArticlesByScore" "0"
1648808694.219638 [0 [::1]:47502] "ZADD" "cute-cats" "1.648808690934E15" "0"
1648808694.220752 [0 [::1]:47502] "ZADD" "os" "1.648808690934E15" "0"
1648808694.221890 [0 [::1]:47502] "ZSCORE" "ArticlesByScore" "1"
1648808694.222954 [0 [::1]:47502] "ZADD" "cute-cats" "1.648808690474E15" "1"
1648808694.224108 [0 [::1]:47502] "ZSCORE" "ArticlesByScore" "2"
1648808694.225321 [0 [::1]:47502] "ZADD" "os" "1.648808691483E15" "2"
1648808694.226391 [0 [::1]:47502] "ZREVRANGEBYSCORE" "cute-cats" "9.223372036854776E18" "0.0"
1648808694.227372 [0 [::1]:47502] "DEL" "MostRecentResult"
1648808694.228449 [0 [::1]:47502] "RPUSH" "MostRecentResult" "0"
1648808694.229378 [0 [::1]:47502] "RPUSH" "MostRecentResult" "1"
1648808694.230292 [0 [::1]:47502] "LRANGE" "MostRecentResult" "0" "3"
1648808694.231297 [0 [::1]:47502] "HGETALL" "0"
1648808694.232460 [0 [::1]:47502] "HGETALL" "1"
```
```
{link=http://www.youtube.com, votes=2, id=0, title=title195, user=Jane, now=1648808689934000}
{link=http://www.weibo.com, votes=1, id=1, title=title53, user=Bob, now=1648808689974000}
```

22 getGroupArticles to retrieve the first page of articles in the os group, followed by printArticles for the result-set.

```
1648808694.236168 [0 [::1]:47502] "ZREVRANGEBYSCORE" "os" "9.223372036854776E18" "0.0"
1648808694.237306 [0 [::1]:47502] "DEL" "MostRecentResult"
1648808694.238358 [0 [::1]:47502] "RPUSH" "MostRecentResult" "2"
1648808694.239305 [0 [::1]:47502] "RPUSH" "MostRecentResult" "0"
1648808694.240325 [0 [::1]:47502] "LRANGE" "MostRecentResult" "0" "3"
1648808694.241215 [0 [::1]:47502] "HGETALL" "2"
1648808694.242406 [0 [::1]:47502] "HGETALL" "0"
```

```
{link=http://www.instagram.com, votes=3, id=2, title=title3, user=Joel, now=1648808689983000}
{link=http://www.youtube.com, votes=2, id=0, title=title195, user=Jane, now=1648808689934000}
```