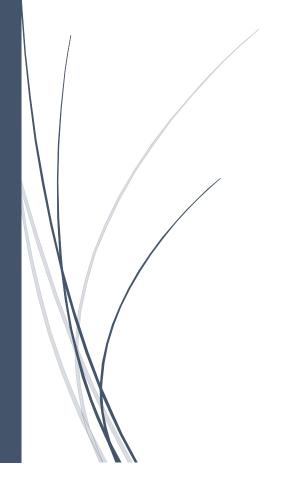
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Course: CSE 4410

Database Management System II LAB 7



K.M. Tahlil Mahfuz Faruk Islamic University of Technology

Insertions:

```
use socialMedia;
db.posts.deleteMany({});
db.users.deleteMany({});
```

```
db.users.insertOne({
});
db.users.insertMany([
  "email": "mahfuz@gmail.com",
  "date_of_birth": ISODate("1995-03-01"),
  "profile_creation_date": ISODate("2022-01-01"),
  "hobbies": ["reading", "coding", "sleeping"]
   "name": "Faruk",
    "date_of_birth": ISODate("1990-05-15"),
    "profile_creation_date": ISODate("2022-02-01"),
```

```
//2.C
db.users.insertOne({
    "name": "Mamun",
    "email": "mamun@gmail.com",
    "password": "nope bolbo na",
    "phone_no": "198469136591",
    "date_of_birth": ISODate("1992-12-25"),
    "address": "Mohammadpur",
    "profile_creation_date": ISODate("2022-03-01"),
    "working_status": "Software Engineer"
});
```

Queries:

```
//3.A
db.posts.find().sort({creation_time:-1});

//3.B
db.posts.find({"creation_time":{$gt:new Date(Date.now() - 24*60*60*1000)}});

//3.C
db.users.find({$where:"this.followers && this.followers.length >3"});

//3.D
db.users.find({ $where:"this.following && this.following.length >3"});
```

Query Results:

2.A

```
test> use socialMedia
switched to db socialMedia
socialMedia> db.posts.find().sort({creation_time:-1});
  {
    _id: ObjectId("64135fa74ef1af4381cfccce"),
    content: 'kroom kroom',
creation_time: ISODate("2023-03-16T18:27:51.360Z"),
    user_id: 'talha123@gmail.com',
likes: [ 'muaz123@gmail.com', 'mukit123@gmail.com' ],
comments: [ 'Xoxx', 'Nice pic', 'Mama treat dao' ]
  },
    _id: ObjectId("64135fa74ef1af4381cfcccc"),
    content: 'Broom Broom',
creation_time: ISODate("2022-03-05T12:00:00.000Z"),
    user_id: 'tingting@gmail.com',
    likes: [ 'pingping@gmail.com', 'tamim@gmail.com' ],
    comments: 'tumi kharap'
    _id: ObjectId("64135fa74ef1af4381cfcccd"),
    content: 'Troom Troom',
    creation_time: ISODate("2022-03-05T12:00:00.000Z").
    user_id: 'talha@gmail.com',
    likes: [ 'muaz@gmail.com', 'mukit@gmail.com' ],
    comments: [ 'Xoxx', 'Nice pic', 'Mama treat dao' ]
```

Explanation:

Here creation time -1 will return the result according to the creation time in descending order.

Explanation:

Here we used the find() along with sort(). Then we convert it into 24 hour behind from the current date. 1000 needs to be multiplied because the date.now() returns current date on milliseconds. We convert it into seconds by multiplying 1000.

2.C

```
socialMedia> db.users.find({$where:"this.followers && this.followers.length >3"});
     _id: ObjectId("64135fa44ef1af4381cfccca"),
     name: 'Faruk',
     email: 'faruk@gmail.com',
     password: 'bolbo na akdomi',
     phone_no: '1234567890'
     date_of_birth: ISODate("1990-05-15T00:00:00.000Z").
     address: 'Dhaka',
     profile_creation_date: ISODate("2022-02-01T00:00:00.000Z"),
    hobbies: [ 'reading', 'moaning' ],
followers: [ 'Kawser', 'Hero Alom', 'Shoumik', 'Kawsar', 'tanzim', 'nibir' ],
following: [ 'tahlil', 'mahfuz', 'faruk' ]
     _id: ObjectId("64135fa54ef1af4381cfcccb"),
     name: 'Mamun',
email: 'mamun@gmail.com',
     password: 'nope bolbo na',
     phone_no: '198469136591'
     date_of_birth: ISODate("1992-12-25T00:00:00.000Z"),
     address: 'Mohammadpur', profile_creation_date: ISODate("2022-03-01T00:00:00.000Z"),
    working_status: 'Software Engineer',
followers: [ 'Nibir', 'Hero Alom', 'Shoumik', 'Kawsar', 'tanzim' ],
following: [ 'tahlil', 'mahfuz', 'faruk', 'Shakkhor' ]
```

Explanation:

Here \$where operator is used. This.followers will return the followers in users collection and this.followers > 3 will apply condition on the returned result set.

2.D

Explanation:

Here \$where operator is used. This.following will return the followers in users collection and this.following > 3 will apply condition on the returned result set.