

Exercise Answers

Create a Database named 'MYWall'

```
> use MYWall
switched to db MYWall
> db
MYWall
```

Create two collections named 'user and "post'

```
> db.createCollection("user")
{ "ok" : 1 }
> db.createCollection("post")
{ "ok" : 1 }
> show dbs
MYWall  0.000GB
admin    0.000GB
config  0.000GB
local   0.000GB
testdb  0.000GB
```

Insert some post related information like post_id, title, description, posted_by, comments, created_at etc...

```
> db.post.insertMany( [ {post_id: 1, title: 'post_1', description: 'some text', posted_by: new Date(), comments: [], created_at: new Date() }, { post_id: 2, title: 'post_2', description: 'some text', posted_by: new Date(), comments: [], created_at: new Date()} ])
{
  acknowledged: true,
  insertedIds: [
    ObjectId("5eaffce90baabb23dc76befb"),
    ObjectId("5eaffce90baabb23dc76befc")
  ]
}
```

```
> db.post.find().pretty()
{
  "_id" : ObjectId("5eaffce90baabb23dc76befb"),
  "post_id" : 1,
  "title" : "post_1",
  "description" : "some text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [ ],
  "created_at" : ISODate("2020-05-04T11:30:49.259Z")
}
{
  "_id" : ObjectId("5eaffce90baabb23dc76befc"),
  "post_id" : 2,
  "title" : "post_2",
  "description" : "some text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [ ],
  "created_at" : ISODate("2020-05-04T11:30:49.259Z")
}
> 
```

Comments should be an array of objects which has comment_id, message, timestamp

Write query to add a new comment for a post

```
> db.post.update(
... { post_id: 1 },
... { $push: { comments: { comment_id: 1, message: 'some text', timestamp:
  new Date() } } } )
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.post.find({post_id: 1}).pretty()
{
  "_id" : ObjectId("5eaffce90baabb23dc76befb"),
  "post_id" : 1,
  "title" : "post_1",
  "description" : "some text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T11:50:42.077Z")
    }
  ],
  "created_at" : ISODate("2020-05-04T11:30:49.259Z")
}
```

Write query to update description of a post

```
> db.post.update(
... { post_id: 2 },
... {
...   $set: {
...     description: 'updated text'
...   }
... })
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.post.find({post_id: 2}).pretty()
{
  "_id" : ObjectId("5eaffce90baabb23dc76befc"),
  "post_id" : 2,
  "title" : "post_2",
  "description" : "updated text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [ ],
  "created_by" : ISODate("2020-05-04T11:30:49.259Z")
}
```

Write query to update comment message

```
> db.post.update( {post_id: 1}, {$set: { "comments.$[element].message" : "
updated message" }}, { arrayFilters: [{"element.comment_id": {$eq: 1}}] })

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.post.find({post_id: 1}).pretty()
{
  "_id" : ObjectId("5eaffce90baabb23dc76befb"),
  "post_id" : 1,
  "title" : "post_1",
  "description" : "some text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "updated message",
      "timestamp" : ISODate("2020-05-04T11:50:42.077Z")
    },
    {
      "comment_id" : 2,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T11:59:18.728Z")
    }
  ],
  "created_at" : ISODate("2020-05-04T11:30:49.259Z")
}
```


Write query to remove a comment

```
> db.post.find({post_id: 1}).pretty()
{
  "_id" : ObjectId("5eaffce90baabb23dc76befb"),
  "post_id" : 1,
  "title" : "post_1",
  "description" : "some text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T11:50:42.077Z")
    },
    {
      "comment_id" : 2,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T11:59:18.728Z")
    },
    {
      "comment_id" : 3,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T12:01:15.394Z")
    }
  ],
  "created_at" : ISODate("2020-05-04T11:30:49.259Z")
}
```

```
> db.post.update({post_id: 1}, { $pop: {comments: 1}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.post.find({post_id: 1}).pretty()
{
  "_id" : ObjectId("5eaffce90baabb23dc76befb"),
  "post_id" : 1,
  "title" : "post_1",
  "description" : "some text",
  "posted_by" : ISODate("2020-05-04T11:30:49.259Z"),
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T11:50:42.077Z")
    },
    {
      "comment_id" : 2,
      "message" : "some text",
      "timestamp" : ISODate("2020-05-04T11:59:18.728Z")
    }
  ],
  "created_at" : ISODate("2020-05-04T11:30:49.259Z")
}
```