

Exercise on MongoDB

1. Create a Database named 'MYWall'

A.

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

2. Create two collections named 'user and "post'

```
> db.createCollection('post');  
{ "ok" : 1 }  
> db.createCollection('user');  
{ "ok" : 1 }  
> show collections  
post  
user  
> █
```

3. Insert some post related information like post_id, title, description , posted_by, comments, created_at etc...
4. Comments should be an array of objects which has comment_id, message, timestamp

```
> db.post.insert({ "post_id": ObjectId() , "title":"MongoBasics", "description":"Mongo is good.", "posted_by": 1, "comments":[ { "comment_id":1, "message": "i have no idea what you talking about?", timestamp: Date() }], created_at: Date() });
```

```
> db.post.insert({ "post_id": ObjectId() , "title":"Node", "description":"Node is good.", "posted_by": 1, "comments":[ { "comment_id":2, "message": "Now I know what you talking about?", timestamp: Date() }], created_at: Date() });
```

Post collection:

```
> db.post.find().pretty()
{
  "_id" : ObjectId("5cb596502a1be150f2372d90"),
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),
  "title" : "MongoBasics",
  "description" : "Mongo is good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "i have no idea what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
}
{
  "_id" : ObjectId("5cb596852a1be150f2372d92"),
  "post_id" : ObjectId("5cb596852a1be150f2372d91"),
  "title" : "Node",
  "description" : "Node is good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 2,
      "message" : "Now I know what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:17:01 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:17:01 GMT+0530 (IST)"
}
```

5. Write query to add a new comment for a post
A.

Original Post(see comments) :

```
{
  "_id" : ObjectId("5cb596502a1be150f2372d90"),
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),
  "title" : "MongoBasics",
  "description" : "Mongo is good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "i have no idea what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
}
```

Command:

```
> db.post.update({ title: "MongoBasics"}, {$push:{comments: { comment_id:3, message: "
Thanks for adding this.", timestamp: Date() }}})
```

Updated post: (see comments):

```
{
  "_id" : ObjectId("5cb596502a1be150f2372d90"),
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),
  "title" : "MongoBasics",
  "description" : "Mongo is good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "i have no idea what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
    },
    {
      "comment_id" : 3,
      "message" : "Thanks for adding this.",
      "timestamp" : "Tue Apr 16 2019 14:55:17 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
}
```

6. Write query to update description of a post.

A. *Original post:* (see description)

```
{
  "_id" : ObjectId("5cb596502a1be150f2372d90"),
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),
  "title" : "MongoBasics",
  "description" : "Mongo is good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "i have no idea what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
    },
    {
      "comment_id" : 3,
      "message" : "Thanks for adding this.",
      "timestamp" : "Tue Apr 16 2019 14:55:17 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
}
```

Command:

```
> db.post.update({ post_id:ObjectId("5cb596502a1be150f2372d8f")},{ $set: {description:"Mo
no is not so good."} })
```

Updated Post:
(see description)

```
{
  "_id" : ObjectId("5cb596502a1be150f2372d90"),
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),
  "title" : "MongoBasics",
  "description" : "Mono is not so good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "i have no idea what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
    },
    {
      "comment_id" : 3,
      "message" : "Thanks for adding this.",
      "timestamp" : "Tue Apr 16 2019 14:55:17 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
}
```

7. Write query to update comment message

A. *Original comment* >

```
{
  "comment_id" : 3,
  "message" : "Thanks for adding this.",
  "timestamp" : "Tue Apr 16 2019 14:55:17 GMT+0530 (IST)"
}
```

Command >

```
> db.post.update({ post_id:ObjectId("5cb596502a1be150f2372d8f"),"comments.comment_id":3
},{ $set: {"comments.$.message":"I m so lucky."} })
```


Updated Comment >

```
{  
  "comment_id" : 3,  
  "message" : "I m so lucky.",  
  "timestamp" : "Tue Apr 16 2019 14:55:17 GMT+0530 (IST)"  
}
```

8. Write query to remove a comment.

A.

post collection before removing the comment(look at comment_id: 3)>

```
> db.post.find().pretty()
{
  "_id" : ObjectId("5cb596502a1be150f2372d90"),
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),
  "title" : "MongoBasics",
  "description" : "Mono is not so good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "i have no idea what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
    },
    {
      "comment_id" : 3,
      "message" : "I m so lucky.",
      "timestamp" : "Tue Apr 16 2019 14:55:17 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"
}
{
  "_id" : ObjectId("5cb596852a1be150f2372d92"),
  "post_id" : ObjectId("5cb596852a1be150f2372d91"),
  "title" : "Node",
  "description" : "Node is good.",
  "posted_by" : 1,
  "comments" : [
    {
      "comment_id" : 2,
      "message" : "Now I know what you talking aboout?",
      "timestamp" : "Tue Apr 16 2019 14:17:01 GMT+0530 (IST)"
    }
  ],
  "created_at" : "Tue Apr 16 2019 14:17:01 GMT+0530 (IST)"
}
```

Following command will remove the comment from the post of mentioned *post_id* and the comment of mentioned *comment_id*.

```
> db.post.update({ post_id:ObjectId("5cb596502a1be150f2372d8f")},{ $pull: {"comments":  
{ comment_id:3      }} })
```

post collection after removing the comment(comment with *comment_id*:3 deleted)>

```
> db.post.find().pretty()  
{  
  "_id" : ObjectId("5cb596502a1be150f2372d90"),  
  "post_id" : ObjectId("5cb596502a1be150f2372d8f"),  
  "title" : "MongoBasics",  
  "description" : "Mono is not so good.",  
  "posted by" : 1,  
  "comments" : [  
    {  
      "comment_id" : 1,  
      "message" : "i have no idea what you talking aboout?",  
      "timestamp" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"  
    }  
  ],  
  "created_at" : "Tue Apr 16 2019 14:16:08 GMT+0530 (IST)"  
}  
{  
  "_id" : ObjectId("5cb596852a1be150f2372d92"),  
  "post_id" : ObjectId("5cb596852a1be150f2372d91"),  
  "title" : "Node",  
  "description" : "Node is good.",  
  "posted by" : 1,  
  "comments" : [  
    {  
      "comment_id" : 2,  
      "message" : "Now I know what you talking aboout?",  
      "timestamp" : "Tue Apr 16 2019 14:17:01 GMT+0530 (IST)"  
    }  
  ],  
  "created_at" : "Tue Apr 16 2019 14:17:01 GMT+0530 (IST)"  
}
```