

Q1 : Create a Database named 'MYWall'

```
> show dbs;
admin    0.000GB
config   0.000GB
dbname    0.000GB
local    0.000GB
> use MYWall;
switched to db MYWall
```

Q2. Create two collections named 'user' and 'post'.

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

Q3. Insert some post related information like post_id, title, description, posted_by, comments, created_at etc.

User Insert :

```
> db.user.insertMany([{"user_id": 1,"name": "Abhishek Yadav"}, {"user_id": 2,"name": "Ashutosh Raj"}, {"user_id": 3,"name": "Jitender Singh"}, {"user_id": 4,"name": "Rubi Saini"}]);
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("5cb59d1b531a4a21b80e8815"),
    ObjectId("5cb59d1b531a4a21b80e8816"),
    ObjectId("5cb59d1b531a4a21b80e8817"),
    ObjectId("5cb59d1b531a4a21b80e8818")
  ]
}
> db.user.find().pretty();
{
  "_id" : ObjectId("5cb59d1b531a4a21b80e8815"),
  "user_id" : 1,
  "name" : "Abhishek Yadav"
}
{
  "_id" : ObjectId("5cb59d1b531a4a21b80e8816"),
  "user_id" : 2,
  "name" : "Ashutosh Raj"
}
{
  "_id" : ObjectId("5cb59d1b531a4a21b80e8817"),
  "user_id" : 3,
  "name" : "Jitender Singh"
}
{
  "_id" : ObjectId("5cb59d1b531a4a21b80e8818"),
  "user_id" : 4,
  "name" : "Rubi Saini"
}
```

Insert Posts :

```
> db.post.insert(
...   {
...     "post_id":1,
...     "title":"First Post",
...     "description":"this is post description",
...     "posted_by":1,
...     "created_at":Date(),
...     "comments":[
...       {
...         "comment_id":1,
...         "message":"this is comment message",
...         "timestamp":Date()
...       },
...       {
...         "comment_id":2,
...         "message":"this is comment message 2",
...         "timestamp":Date()
...       }
...     ],
...   }
... );
WriteResult({ "nInserted" : 1 })
```

```
> db.post.find().pretty();
{
  "_id" : ObjectId("5cb5a374531a4a21b80e8819"),
  "post_id" : 1,
  "title" : "First Post",
  "description" : "this is post description",
  "posted_by" : 1,
  "created_at" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)",
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "this is comment message",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    {
      "comment_id" : 2,
      "message" : "this is comment message 2",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    }
  ]
}
{
  "_id" : ObjectId("5cb5a53e531a4a21b80e881a"),
  "post_id" : 2,
  "title" : "second Post",
  "description" : "this is post description",
  "posted_by" : 1,
  "created_at" : "Tue Apr 16 2019 15:19:50 GMT+0530 (IST)",
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "this is comment message",
      "timestamp" : "Tue Apr 16 2019 15:19:50 GMT+0530 (IST)"
    },
    {
      "comment_id" : 2,
```

Q4. Comments should be an array of objects which has comment_id, Message, timestamp.

Ans: Answer to this question is covered in above question's answer.

Q5. Write query to add a new comment for a post.

Ans: Writing a query to comment on post 1.

```
> db.post.update({post_id:1},
... {
...   $push:{comments:[
...   {
...     "comment_id":3,
...     "message":"this is new comment",
...     "timestamp":Date()
...   }
... ]}
... }
... );
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

Displaying the update:

```
> db.post.find({post_id:1}).pretty();
{
  "_id" : ObjectId("5cb5a374531a4a21b80e8819"),
  "post_id" : 1,
  "title" : "First Post",
  "description" : "this is post description",
  "posted_by" : 1,
  "created_at" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)",
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "this is comment message",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    {
      "comment_id" : 2,
      "message" : "this is comment message 2",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    [
      {
        "comment_id" : 3,
        "message" : "this is new comment",
        "timestamp" : "Tue Apr 16 2019 15:53:29 GMT+0530 (IST)"
      }
    ]
  ]
}
```

Q6: Write a query to update description of a post.

Ans:

```
> db.post.update(
... {post_id:1},
... {$set:{
... 'description':"this is modified description of the post"
... }}
... );
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

Showing updated value:

```
> db.post.find({post_id:1}).pretty();
{
  "_id" : ObjectId("5cb5a374531a4a21b80e8819"),
  "post_id" : 1,
  "title" : "First Post",
  "description" : "this is modified description of the post",
  "posted_by" : 1,
  "created_at" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)",
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "this is comment message",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    {
      "comment_id" : 2,
      "message" : "this is comment message 2",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    [
      {
        "comment_id" : 3,
        "message" : "this is new comment",
        "timestamp" : "Tue Apr 16 2019 15:53:29 GMT+0530 (IST)"
      }
    ]
  ]
}
```

Q7. Write a query to update a comment message.

Ans:

```
> db.post.update(
... {post_id:1,'comments.comment_id':1},
... {$set:{
... 'comments.$.message':"This is edited comment"
... }}
... );
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.post.find({post_id:1},{comments:1}).pretty();
{
  "_id" : ObjectId("5cb5a374531a4a21b80e8819"),
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "This is edited comment",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    {
      "comment_id" : 2,
      "message" : "this is comment message 2",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    [
      {
        "comment_id" : 3,
        "message" : "this is new comment",
        "timestamp" : "Tue Apr 16 2019 15:53:29 GMT+0530 (IST)"
      }
    ]
  ]
}
```

Q8. Write a query to remove a comment.

Ans: In this snippet. Comment 2 of post_id 1 will be deleted.

```
> db.post.update({post_id:1},{pull:{comments:{comment_id:2}}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.post.find({post_id:1},{comments:1}).pretty();
{
  "_id" : ObjectId("5cb5a374531a4a21b80e8819"),
  "comments" : [
    {
      "comment_id" : 1,
      "message" : "This is edited comment",
      "timestamp" : "Tue Apr 16 2019 15:12:12 GMT+0530 (IST)"
    },
    [
      {
        "comment_id" : 3,
        "message" : "this is new comment",
        "timestamp" : "Tue Apr 16 2019 15:53:29 GMT+0530 (IST)"
      }
    ]
  ]
}
```