ADVANCED WEB APPLICATION DEVELOPMENT
WEEK-8 ASSIGNMENT

1.Explain Reading of Data from Documents in MONGODB.

To select documents in a collection, you use the findOne() method:

Syntax :
db.books.findOne()
Code language: CSS (css)

Output:
{ "_id" : ObjectId("5f2f3d8882f5c7bd6c9375ab"), "title"
: "MongoDB Tutorial", "published_year" : 2020 }
Code language: JSON / JSON with Comments (json)

To format the output, you use the pretty() method like
this:
db.books.find().pretty()
Code language: CSS (css)

Output:
{
"_id" : ObjectId("5f2f3d8882f5c7bd6c9375ab"),
"title" : "MongoDB Tutorial",
"published_year" : 2020
}
Code language: JSON / JSON with Comments (json) As you can see clearly from the output,
MongoDB added the _id field together with other field-and- value pairs to the document.

2.What are different methods to insert Document in MONGODB

The MongoDB shell provides the following methods to insert documents into a collection:

- To insert a single document, use db.collection.insertOne().
- To insert multiple documents, use db.collection.insertMany().

Insert a single document

db.collection.insertOne() inserts a single document into a collection. If the document does not specify
an _id field, MongoDB adds the _id field with an ObjectId value to the new document

use sample_mflix

db.movies.insertOne(
  {
    title: "The Favourite",
    genres: ["Drama", "History"],
    runtime: 121,
    rated: "R",

```
    year: 2018,
    directors: [ "Yorgos Lanthimos" ],
    cast: [ "Olivia Colman", "Emma Stone", "Rachel Weisz" ],
    type: "movie"
  }
)
```

Insert a multiple documents :
db.collection.insertMany() can insert multiple documents into a collection. Pass an array of documents to the method. If the documents do not specify an _id field, MongoDB adds the _id field with an ObjectId value to each document.

```
use sample_mflix

db.movies.insertMany([
  {
    title: "Jurassic World: Fallen Kingdom",
    genres: [ "Action", "Sci-Fi" ],
    runtime: 130,
    rated: "PG-13",
    year: 2018,
    directors: [ "J. A. Bayona" ],
    cast: [ "Chris Pratt", "Bryce Dallas Howard", "Rafe Spall" ],
    type: "movie"
  },
  {
    title: "Tag",
    genres: [ "Comedy", "Action" ],
    runtime: 105,
    rated: "R",
    year: 2018,
    directors: [ "Jeff Tomsic" ],
    cast: [ "Annabelle Wallis", "Jeremy Renner", "Jon Hamm" ],
    type: "movie"
  }
])
```

3.What is Find method in MongoDB

The find() method in MongoDB selects documents in a collection or view and returns a cursor to the selected documents. It has two parameters: query and projection.

Syntax :
db.collection.find(<query>,<projection>)

4.Discuss Databases and Collections with suitable Example.

In MongoDB, databases hold one or more collections of documents. To select a database to use, in mongosh, issue the use <db> statement, as in the following example:

Create a Database
If a database does not exist, MongoDB creates the database when you first store data for that database. As such, you can switch to a non-existent database and perform the following operation in mongosh:

```
use myNewDB

db.myNewCollection1.insertOne( { x: 1 } )
```

The insertOne() operation creates both the database myNewDB and the collection myNewCollection1 if they do not already exist. Be sure that both the database and collection names follow MongoDB Naming Restrictions.

Collections
MongoDB stores documents in collections. Collections are analogous to tables in relational databases.

Create a Collection
If a collection does not exist, MongoDB creates the collection when you first store data for that collection.

```
db.myNewCollection2.insertOne( { x: 1 } )
db.myNewCollection3.createIndex( { y: 1 } )
```

Both the insertOne() and the createIndex() operations create their respective collections if they do not already exist. Be sure that the collection name follows MongoDB Naming Restrictions.