

Q1) List the existing databases.

```
test> show dbs;
Sourabh  72.00 KiB
admin    40.00 KiB
config   84.00 KiB
local    72.00 KiB
practical 40.00 KiB
test     72.00 KiB
```

Q2) Create a database named Person and collection student and demonstrate insert, insertOne, insertMany with same key-value pair.

```
Person> db.createCollection("Student");
{ ok: 1 }
```

```
Person> db.Student.insert({Name: "Krish Agarwal", Age: 19, Height: 179, Weight: 76, DOB:
: Date(2003-05-0)});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63d9de26b35048f9c90b32d8") }
}
Person> db.Student.insertOne({Name: "Shreyansh Padarha", Age: 19, Height: 182, Weight:
74, DOB: Date(2003-06-01)});
{
  acknowledged: true,
  insertedId: ObjectId("63d9def7b35048f9c90b32d9")
}
Person> db.Student.insertMany([Name: "Ricky K", Age: 22, Height: 179, Weight: 69, DOB:
Date(2003-11-23)}, {Name: "Sneha Gupta", Age: 18, Height: 169, Weight: 60, DOB: Date(2
004-02-21)}]);
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("63d9dfb2b35048f9c90b32da"),
    '1': ObjectId("63d9dfb2b35048f9c90b32db")
  }
}
```

Q3) Create a collection family with dynamic key-value pairs. Insert an array of values for a key and embedded document.

```
Person> db.createCollection("Family");
{ ok: 1 }

Person> db.Family.insertMany([
  {Member: "Krish Agarwal",
    ... Age: 19,
    ... DOB: Date(2003-05-05),
    ... Phone: [9712057591, 7219742069],
    ... Salary: "None"},
  {Member: "Bheem",
    ... Age: 1000,
    ... DOB: Date(1013-02-01)},
  {Member: "Raju",
    ... Age: 250,
    ... DOB: Date(1773-04-01),
    ... Graduation: {School: "DPS", UG: "CHRIST UNIVERSITY", PG: "Harvard"}}]);
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("63d9e3e5b35048f9c90b32dc"),
    '1': ObjectId("63d9e3e5b35048f9c90b32dd"),
    '2': ObjectId("63d9e3e5b35048f9c90b32de")
  }
}
```

Q4) Create a collection named media details for any posts and comments recieved for the posts. The document should contain one-many relationships i.e. one posts may recieve many comments.

```
Person> db.createCollection("Media_Details");
{ ok: 1 }

Person> db.Media_Details.insertOne({Acc_Num: 1000, Username: "xoxo562", Name: "Harshitha", Email_id: "harshitha@gmail.com", Posts: [{Post_Num: 1, Likes: 563, Shares: 36, Comments: [{Comm_Num: 1, Text: "nice picture!"}, {Comm_Num: 2, Text: "cute!"}]}]});
{
  acknowledged: true,
  insertedId: ObjectId("63d9eb41b35048f9c90b32df")
}

Person> db.Media_Details.insertOne({Acc_Num: 1001, Username: "rick_rolled_123", Name: "Krish", Followers: 436, Following: 974, Bio: "At the gym.", Email_id: "krish@gmail.com", Activity: {Time_spent: 2352, num_of_likes: 786524, num_of_shares: 54378, num_of_comments: 143, Posts: [{Post_num: 1, Caption: "Do you smell chlorine too?", Likes: 647, Shares: 23, Comments: [{comm_num: 1, text: "nice photo!", likes: 3}, {comm_num: 2, text: "cool picture!", likes: 5}]}]}]);
{
  acknowledged: true,
  insertedId: ObjectId("63d9fc61d2ca10d9716c4b28")
}
```

Q5) Display existing collections in the database.

```
Person> show collections;
Family
Media
Media_Details
Person
Student
```

Q6) Display the inserted columns.

```
Person> db.Student.find();
[
  {
    _id: ObjectId("63d9de26b35048f9c90b32d8"),
    Name: 'Krish Agarwal',
    Age: 19,
    Height: 179,
    Weight: 76,
    DOB: 'Wed Feb 01 2023 09:06:06 GMT+0530 (India Standard Time)'
  },
  {
    _id: ObjectId("63d9def7b35048f9c90b32d9"),
    Name: 'Shreyansh Padarha',
    Age: 19,
    Height: 182,
    Weight: 74,
    DOB: 'Wed Feb 01 2023 09:09:35 GMT+0530 (India Standard Time)'
  },
  {
    _id: ObjectId("63d9dfb2b35048f9c90b32da"),
    Name: 'Ricky K',
    Age: 22,
    Height: 179,
    Weight: 69,
    DOB: 'Wed Feb 01 2023 09:12:42 GMT+0530 (India Standard Time)'
  },
  {
    _id: ObjectId("63d9dfb2b35048f9c90b32db"),
    Name: 'Sneha Gupta',
    Age: 18,
    Height: 169,
    Weight: 60,
    DOB: 'Wed Feb 01 2023 09:12:42 GMT+0530 (India Standard Time)'
  }
]
```

```
Person> db.Family.find();
[
  {
    _id: ObjectId("63d9e3e5b35048f9c90b32dc"),
    Member: 'Krish Agarwal',
    Age: 19,
    DOB: 'Wed Feb 01 2023 09:30:37 GMT+0530 (India Standard Time)',
    Phone: [ 9712057591, 7219742069 ],
    Salary: 'None'
  },
  {
    _id: ObjectId("63d9e3e5b35048f9c90b32dd"),
    Member: 'Bheem',
    Age: 1000,
    DOB: 'Wed Feb 01 2023 09:30:37 GMT+0530 (India Standard Time)'
  },
  {
    _id: ObjectId("63d9e3e5b35048f9c90b32de"),
    Member: 'Raju',
    Age: 250,
    DOB: 'Wed Feb 01 2023 09:30:37 GMT+0530 (India Standard Time)',
    Graduation: { School: 'DPS', UG: 'CHRIST UNIVERSITY', PG: 'Harvard' }
  }
]
```

```

Person> db.Media_Details.find();
[
  {
    _id: ObjectId("63d9eb41b35048f9c90b32df"),
    Acc_Num: 1000,
    Username: 'xoxo562',
    Name: 'Harshitha',
    Email_id: 'harshitha@gmail.com',
    Posts: [
      {
        Post_Num: 1,
        Likes: 563,
        Shares: 36,
        Comments: [
          { Comm_Num: 1, Text: 'nice picture!' },
          { Comm_Num: 2, Text: 'cute!' }
        ]
      }
    ]
  }
]
{
  _id: ObjectId("63d9fc61d2ca10d9716c4b28"),
  Acc_Num: 1001,
  Username: 'rick_rolled_123',
  Name: 'Krish',
  Followers: 436,
  Following: 974,
  Bio: 'At the gym.',
  Email_id: 'krish@gmail.com',
  Activity: {
    Time_spent: 2352,
    num_of_likes: 786524,
    num_of_shares: 54378,
    num_of_comments: 143,
    Posts: [
      {
        Post_num: 1,
        Caption: 'Do you smell chlorine too?',
        Likes: 647,
        Shares: 23,
        Comments: [
          { comm_num: 1, text: 'nice photo!', likes: 3 },
          { comm_num: 2, text: 'cool picture!', likes: 5 }
        ]
      }
    ]
  }
}
]
Person> 

```