1. Find documents where the age is between 25 and 30:

```
//find document where the age is between 25 and 30:
db.new_users.find({
   $and:[
   {Age:{$gte:25}},
   {Age:{$lte:30}},
   ]
});
```

Result


```
{
    "_id" : ObjectId("6627d139e89cca4ada0006eb"),
    "Name" : "Ganesh",
    "Age" : NumberInt(25),
    "Email" : "ganesh@hotmail.com",
    "BankBalance" : [
        {
            "BankName" : "Global IME",
            "BankBalance" : NumberInt(1000),
            "currency" : "NPR"
        },
        {
            "BankName" : "Himalayan Bank",
            "BankBalance" : NumberInt(5263),
            "currency" : "NPR"
        }
    ]
}
{
    "_id" : ObjectId("6627d139e89cca4ada0006ec"),
    "Name" : "Amir",
    "Age" : NumberInt(26),
    "Email" : "Amir1@gmail.com",
    "BankBalance" : [
        {
            "BankName" : "State Bank of India",
            "BankBalance" : NumberInt(600),
            "currency" : "INR"
        },
        {
            "BankName" : "Modi Finance",
            "BankBalance" : NumberInt(668),
            "currency" : "INR"
        }
    ]
}
```

```
{
    "_id" : ObjectId("6627d139e89cca4ada0006ed"),
    "Name" : "Helen",
    "Age" : NumberInt(27),
    "Email" : "helen@outlook.com",
    "BankBalance" : [
        {
            "BankName" : "Bank of America",
            "BankBalance" : NumberInt(566),
            "currency" : "USD"
        },
        {
            "BankName" : "California Bank",
            "BankBalance" : NumberInt(555),
            "currency" : "USD"
        }
    ]
}
```


2. Find all users with a bank balance > 500 in any bank

```
//find all users with a bank balance > 500 in any bank
db.new_users.find({"BankBalance.BankBalance":{$gt:500}});
```

Result


```
{
    "_id" : ObjectId("6627d139e89cca4ada0006eb"),
    "Name" : "Ganesh",
    "Age" : NumberInt(25),
    "Email" : "ganesh@hotmail.com",
    "BankBalance" : [
        {
            "BankName" : "Global IME",
            "BankBalance" : NumberInt(1000),
            "currency" : "NPR"
        },
        {
            "BankName" : "Himalayan Bank",
            "BankBalance" : NumberInt(5263),
            "currency" : "NPR"
        }
    ]
}
{
    "_id" : ObjectId("6627d139e89cca4ada0006ec"),
    "Name" : "Amir",
    "Age" : NumberInt(26),
    "Email" : "Amir1@gmail.com",
    "BankBalance" : [
        {
            "BankName" : "State Bank of India",
            "BankBalance" : NumberInt(600),
            "currency" : "INR"
        },
        {
            "BankName" : "Modi Finance",
            "BankBalance" : NumberInt(668),
            "currency" : "INR"
        }
    ]
}
```

3. Update Ganesh's age to 26

```
//update Ganesh's age to 26
db.new_users.updateOne(
{   Name:"Ganesh"},
{$set:{Age:26}}
);
```

Result


```
{
    "_id" : ObjectId("6627d139e89cca4ada0006eb"),
    "Name" : "Ganesh",
    "Age" : NumberInt(26),
    "Email" : "ganesh@hotmail.com",
    "BankBalance" : [
        {
            "BankName" : "Global IME",
            "BankBalance" : NumberInt(1000),
            "currency" : "NPR"
        },
        {
            "BankName" : "Himalayan Bank",
            "BankBalance" : NumberInt(5263),
            "currency" : "NPR"
        }
    ]
}
```


4. Add new bank for Helen (California State Bank, 9K)

```
//Add new Bank for Helen(California State Bank,9k)
db.new_users.updateOne(
{Name:"Helen"},
{$push:{BankBalance:{BankName:"Clifornia State Bank",BankBalance:9000,currency:"USD"}}}
);
```

Result


```
{
    "_id" : ObjectId("6627d139e89cca4ada0006ed"),
    "Name" : "Helen",
    "Age" : NumberInt(27),
    "Email" : "helen@outlook.com",
    "BankBalance" : [
        {
            "BankName" : "Bank of America",
            "BankBalance" : NumberInt(566),
            "currency" : "USD"
        },
        {
            "BankName" : "California Bank",
            "BankBalance" : NumberInt(555),
            "currency" : "USD"
        },
        {
            "BankName" : "Clifornia State Bank",
            "BankBalance" : NumberInt(9000),
            "currency" : "USD"
        }
    ]
}
```

5. Rename California Bank to California SavingsAdd new bank for Helen

```
db.new_users.updateMany(
  { "BankBalance.BankName": "California Bank" },
  { $set: { "BankBalance.$.BankName": "California Savings" } }
)
```

Result


```
{
    "_id" : ObjectId("6627d139e89cca4ada0006ed"),
    "Name" : "Helen",
    "Age" : NumberInt(27),
    "Email" : "helen@outlook.com",
    "BankBalance" : [
        {
            "BankName" : "Bank of America",
            "BankBalance" : NumberInt(566),
            "currency" : "USD"
        },
        {
            "BankName" : "California Savings",
            "BankBalance" : NumberInt(555),
            "currency" : "USD"
        },
        {
            "BankName" : "Clifornia State Bank",
            "BankBalance" : NumberInt(9000),
            "currency" : "USD"
        }
    ]
}
```


6. Find documents with only the name and email fields included in the result:

```
//find document with only the name and email fields included in the result:
db.new_users.find({},{Name:1,Age:1});
```

Result


```
{
    "_id" : ObjectId("6627d139e89cca4ada0006eb"),
    "Name" : "Ganesh",
    "Age" : NumberInt(26)
}
{
    "_id" : ObjectId("6627d139e89cca4ada0006ec"),
    "Name" : "Amir",
    "Age" : NumberInt(26)
}
{
    "_id" : ObjectId("6627d139e89cca4ada0006ed"),
    "Name" : "Helen",
    "Age" : NumberInt(27)
}
{
    "_id" : ObjectId("6627d139e89cca4ada0006ee"),
    "Name" : "Miller",
    "Age" : NumberInt(44)
}
```

7. Find the total number of documents in the collection:

```
// find the total number of document in the collection:
db.new_users.countDocuments();
```

Result

```
The find query will be run with Query Assist.

4
```

8. Find the user with the highest bank balance:

```
// find the user with the higest bank balance:
db.new_users.aggregate([
    { $unwind: "$BankBalance" }, // Unwind the BankBalance array
    { $sort: { "BankBalance.BankBalance": -1 } }, // Sort in descending order based on BankBalance
    { $limit: 1 } // Limit the result to one document
]);
```

Result

```
{
    "_id" : ObjectId("6627d139e89cca4ada0006ed"),
    "Name" : "Helen",
    "Age" : NumberInt(27),
    "Email" : "helen@outlook.com",
    "BankBalance" : {
        "BankName" : "Clifornia State Bank",
        "BankBalance" : NumberInt(9000),
        "currency" : "USD"
    }
}
```