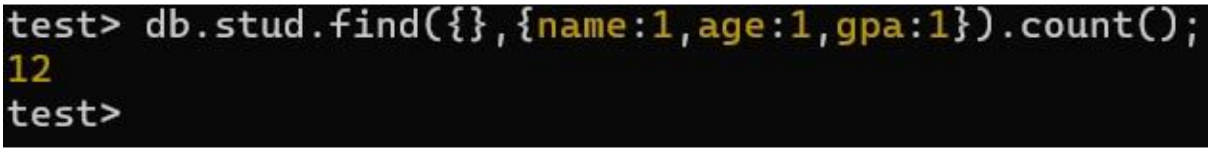
PROJECTION

DOWNLOADING NEW DATA SET :

- **Create new collection called stud.**

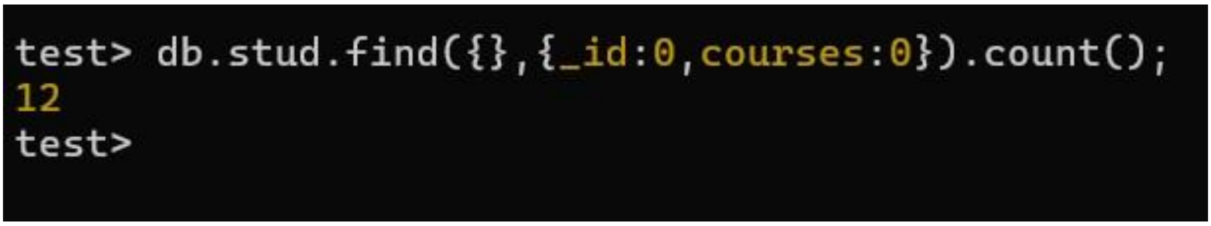
- **Upload the dataset link**

EXAMPLE

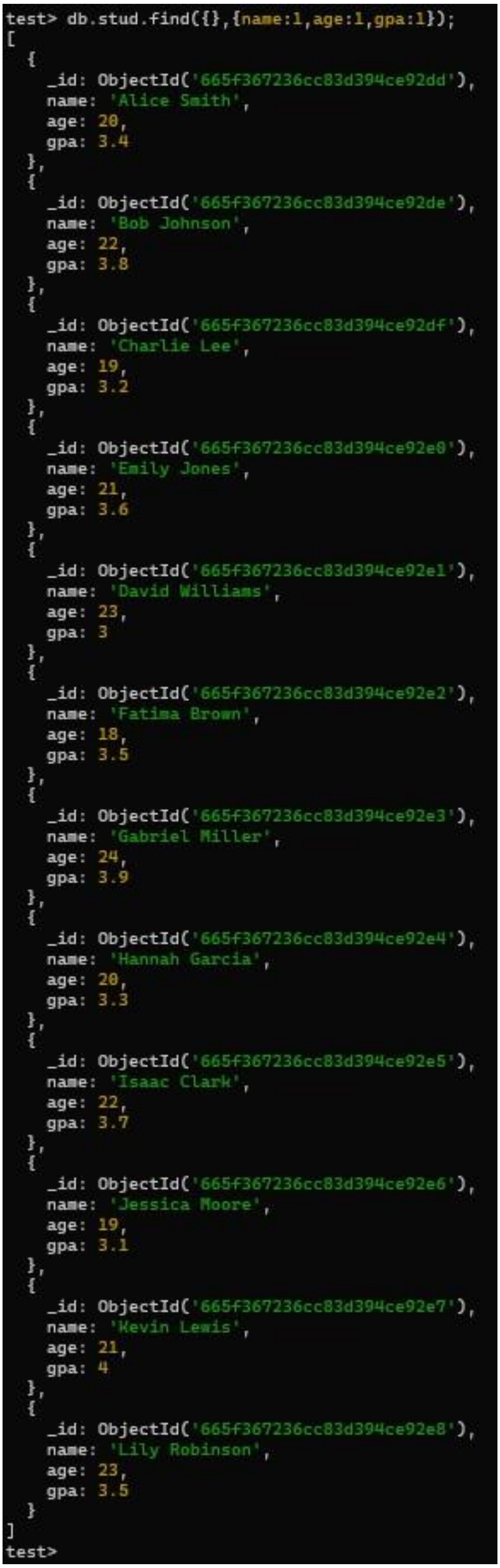


```
test> db.stud.find({},{name:1,age:1,gpa:1}).count();
12
test>
```

EXCLUDING FIELDS :



```
test> db.stud.find({},{_id:0,courses:0}).count();
12
test>
```



```
test> db.stud.find({},{name:1,age:1,gpa:1});
[
  {
    _id: ObjectId('665f367236cc83d394ce92dd'),
    name: 'Alice Smith',
    age: 20,
    gpa: 3.4
  },
  {
    _id: ObjectId('665f367236cc83d394ce92de'),
    name: 'Bob Johnson',
    age: 22,
    gpa: 3.8
  },
  {
    _id: ObjectId('665f367236cc83d394ce92df'),
    name: 'Charlie Lee',
    age: 19,
    gpa: 3.2
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e0'),
    name: 'Emily Jones',
    age: 21,
    gpa: 3.6
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e1'),
    name: 'David Williams',
    age: 23,
    gpa: 3
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e2'),
    name: 'Fatima Brown',
    age: 18,
    gpa: 3.5
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e3'),
    name: 'Gabriel Miller',
    age: 24,
    gpa: 3.9
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e4'),
    name: 'Hannah Garcia',
    age: 20,
    gpa: 3.3
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e5'),
    name: 'Isaac Clark',
    age: 22,
    gpa: 3.7
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e6'),
    name: 'Jessica Moore',
    age: 19,
    gpa: 3.1
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e7'),
    name: 'Kevin Lewis',
    age: 21,
    gpa: 4
  },
  {
    _id: ObjectId('665f367236cc83d394ce92e8'),
    name: 'Lily Robinson',
    age: 23,
    gpa: 3.5
  }
]
test>
```

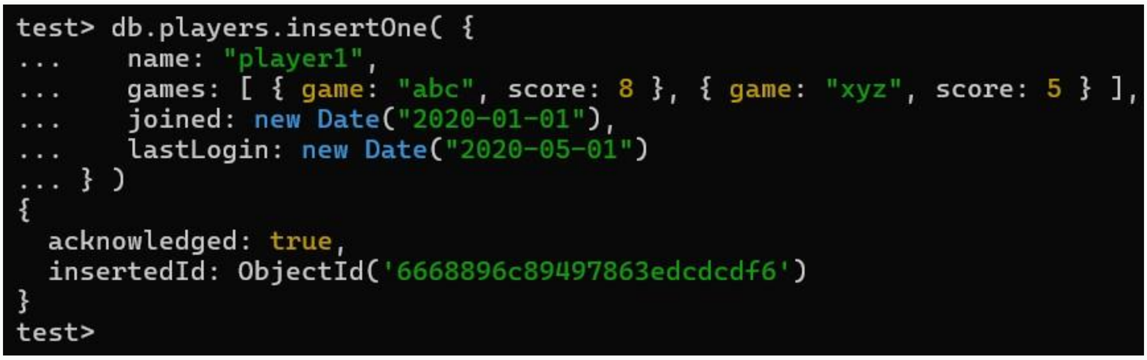
$elemMatch: To download data set click this link

The `$elemMatch` operator limits the contents of an `<array>` field from the query results to contain only the first element matching the `$elemMatch` condition.

Regardless of the ordering of the fields in the document, the `$elemMatch` projection of an existing field returns the field after the other existing field inclusions.

For example, consider a `players` collection with the following document:

```
db.players.insertOne( {
   name: "player1",
   games: [ { game: "abc", score: 8 }, { game: "xyz", score:
5 } ],
   joined: new Date("2020-01-01"),
   lastLogin: new Date("2020-05-01")
} )
```



```
test> db.players.insertOne( {
...     name: "player1",
...     games: [ { game: "abc", score: 8 }, { game: "xyz", score: 5 } ],
...     joined: new Date("2020-01-01"),
...     lastLogin: new Date("2020-05-01")
... } )
{
  acknowledged: true,
  insertedId: ObjectId('6668896c89497863edcdcdf6')
}
test>
```

The following projection returns the `games` field after the other existing fields included in the projection even though in the document, the field is listed before `joined` and `lastLogin` fields: