

Database: campusdb

```
use campusdb
```

Collection: enrollments

```
db.createCollection("enrollments")
```

Tasks:-

1. Use a new database called campusdb

```
use campusdb
```

2. Create a collection enrollments and insert 4 student documents.

```
db.enrollments.insertMany([
{
  name: "Ananya Verma",
  studentId: 101,
  courses: ["Python", "Java"],
  address: { city: "Delhi", state: "Delhi" },
  feesPaid: true
},
{
  name: "Rohan Mehta",
  studentId: 102,
  courses: ["Python", "AI"],
  address: { city: "Bangalore", state: "Karnataka" },
  feesPaid: false
},
{
  name: "Sneha Kapoor",
  studentId: 103,
  courses: [],
  address: { city: "Hyderabad", state: "Telangana" },
  feesPaid: true
},
{
  name: "Imran Shaikh",
  studentId: 104,
  courses: ["Data Science", "Java"],
  address: { city: "Delhi", state: "Delhi" },
  feesPaid: false
}
])
```

3. Display all student records

```
db.enrollments.find()
```

4. Find all students enrolled in "Python"

```
db.enrollments.find(
{courses: {$in: ["Python", "$courses"]}}
)
```

5. Find students from Delhi who have not paid fees

```
db.enrollments.find(  
  {feesPaid: false, "address.state": "Delhi"}  
)
```

6. Add a new course "AI Fundamentals" to a specific student's courses

array

```
db.enrollments.updateOne(  
  {name: "Sneha Kapoor"},  
  {$push: {courses: {$each: ["AI Fundamentals "]}}}  
)
```

7. Update the city of a specific student to "Mumbai"

```
db.enrollments.updateOne(  
  { name: "Imran Shaikh" },  
  { $set: { "address.city": "Mumbai" } }  
)
```

8. Set feesPaid to true for all students from "Delhi"

```
db.enrollments.updateMany(  
  {"address.state": "Delhi"},  
  {$set: {feesPaid: true}}  
)
```

9. Remove "Java" course from any student who has it

```
db.enrollments.updateMany(  
  {courses: {$exists: true}},  
  {$pull: {courses: {$in: ["Java"]}}}  
)
```

10. Delete all students who have no courses enrolled (i.e., courses: [] )

```
db.enrollments.deleteMany(  
  {courses: {$size: 0}}  
)
```