1.Create a new database called student_management.

Use student_management

2.Create a collection called students in the student_mangement database.

db.createCollection("students")

3.Insert at least five student records into the students collection. Each record should have the following fields:

Student_id(integer)

Name(string)

Age(integer)

Department(string)

Courses(array of strings)

Grade(string)

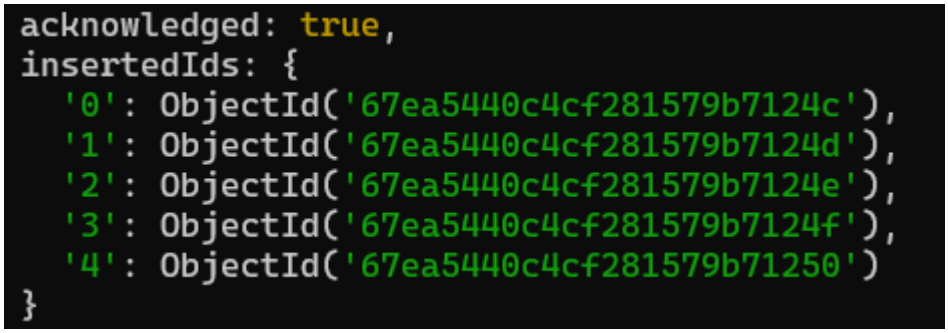
db.students.insertMany([{student_id:101,name:"swati",age:21,department:"Data science",courses:["C++","python"],grade:"A"},

{student_id:102,name:"raj",age:22,department:"Computer Science",course:["PowerBI","Mysql"],grade:"C"},

{student_id:103,name:"rohit",age:25,department:"ComputerApplications",courses:["Bigdata","cloud computing"],grade:"B"},

{student_id:104,name:"aakash",age:27,department:"ComputerScience",courses:["bigdata","cloud computing"],grade:"C"},

{student_id:105,name:"tarun",age:29,department:"artificial intelligence",courses:["database systems"],grade:"A"}])

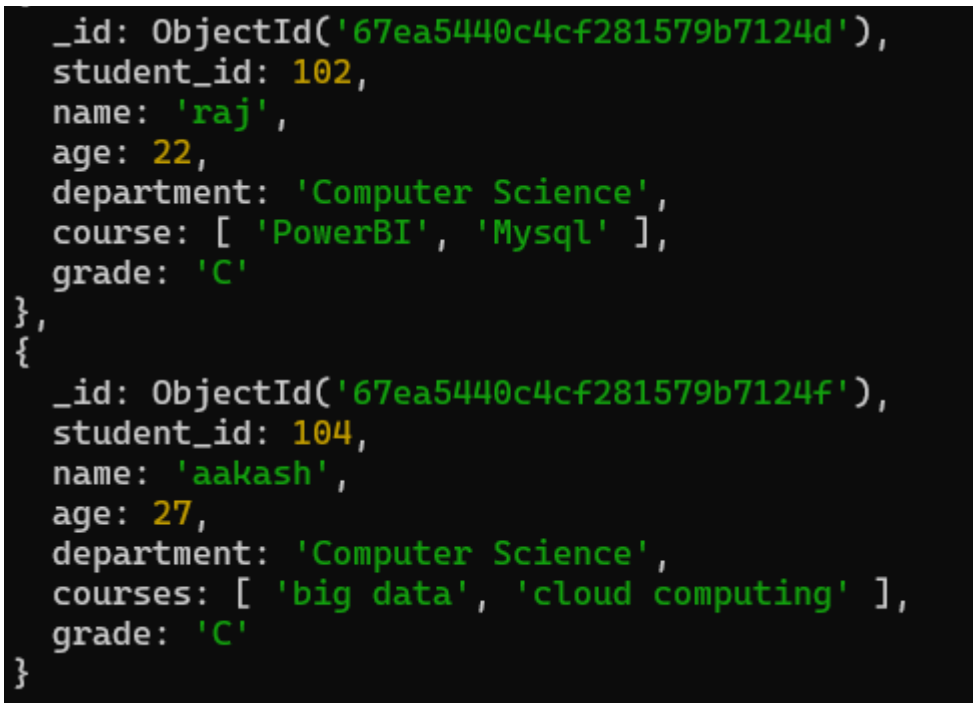


4.Query the collection:

Write queries to perform the following tasks:

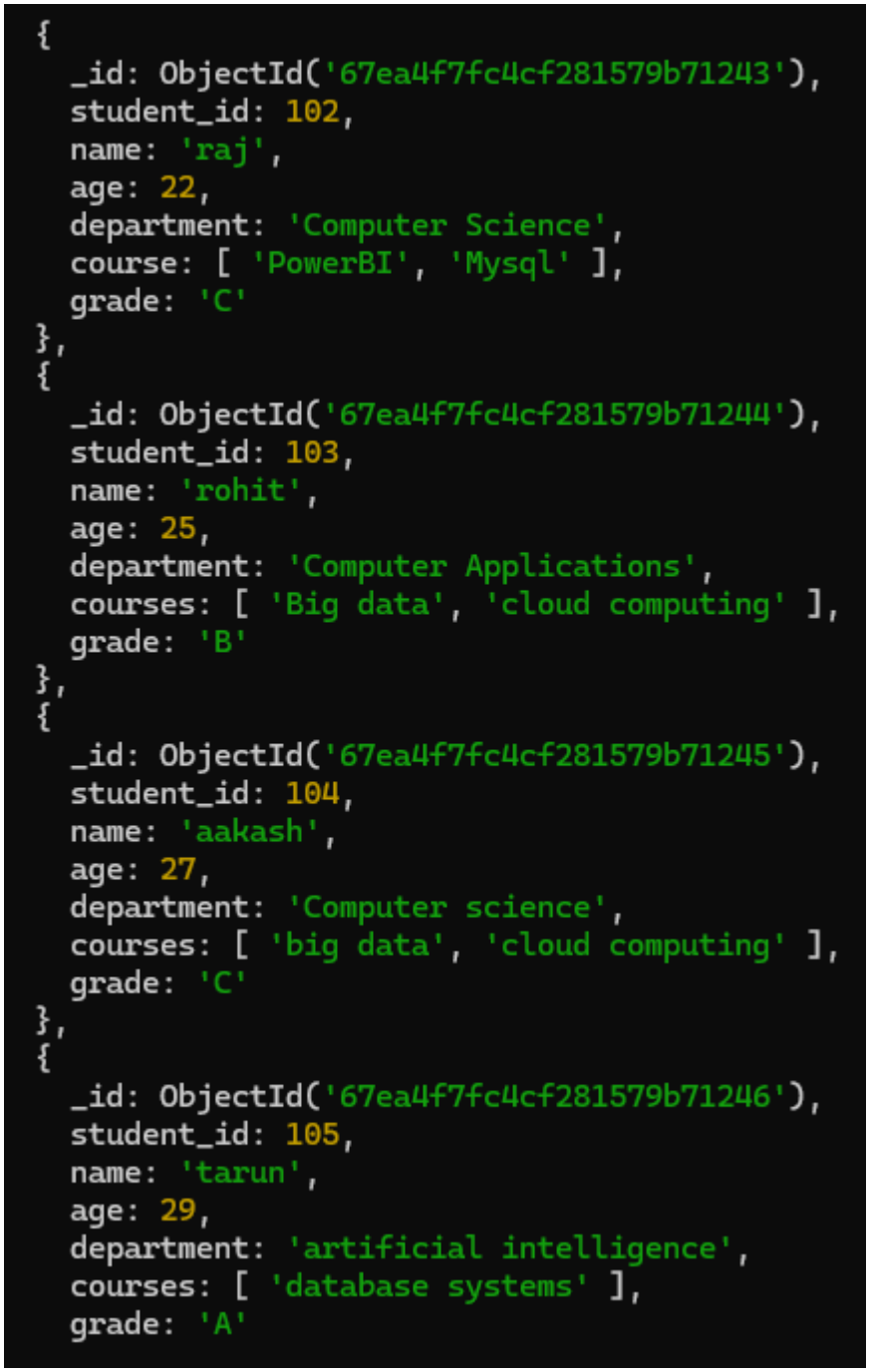
.Retrieve all students who are in the “Computer Science” department.

db.students.find({department:"Computer Science"})



.Retrieve students who have an age greater than 21.

db.students.find({age:{$gt:21}})

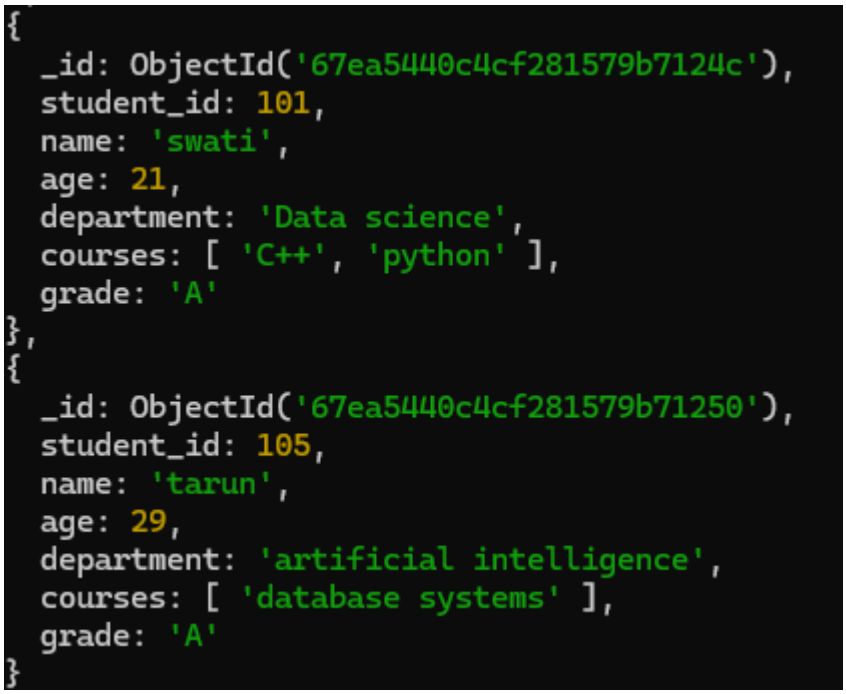


.Retrieve students who are talking the “Datbase systems” course.

db.students.find({courses:"database systems"})

.Retrieve students with a grade of “A”.

db.students.find({grade:"A"})



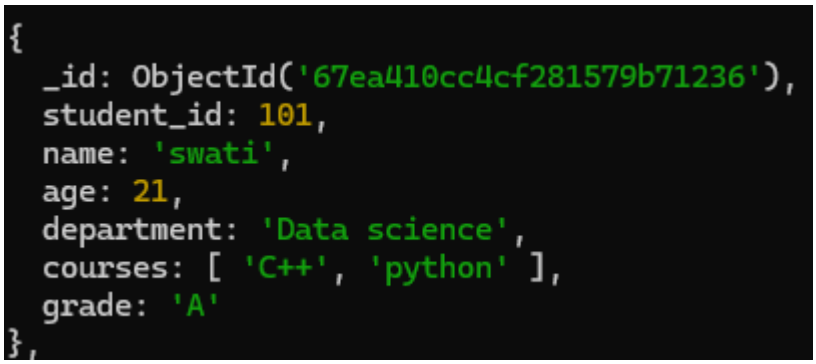
5.Update documents:

.Update the age of a student with student_id 101 to 21.

db.students.updateOne({student_id:101},{$set:{age:21

}})

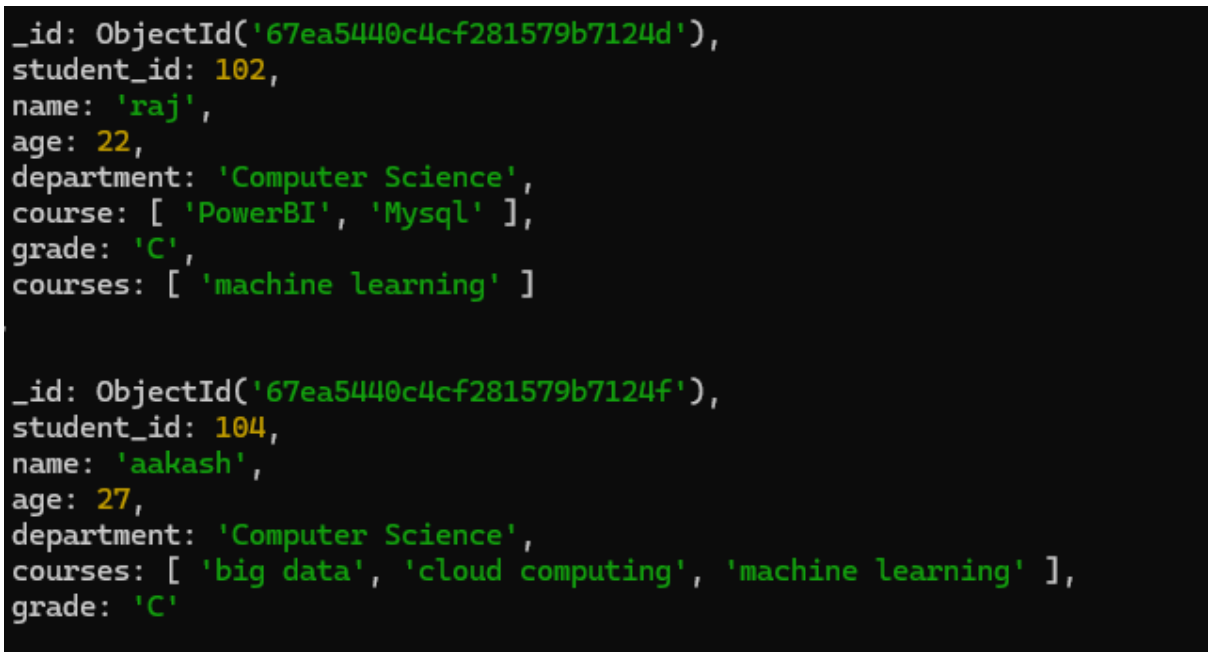
db.students.find({student_id:101})



.Add a new course,"Machine learning",to the courses array for students in the "Computer Science"department.

db.students.updateMany({department:"Computer Science"},{$push:{courses:"machine learning"}})

db.students.find({department:"Computer Science"})



6.Delete Documents:

.Delete a student record with student_id 105.

db.students.deleteOne({student_id:105})

.Delete all students who have a grade lower than “C”.

db.students.deleteMany({grade:{$lt:"C"}})