1. Develop a MongoDB database for a library's book inventory system. The database should handle book details, such as title, author, genre, publication year, availability status, and number of copies. Perform the following operations:
   1. Create a "books" collection and insert at least five documents with various book details including title, author, genre, publication year, availability, and number of copies.
   2. Retrieve all books from the collection where the genre is "Mystery" or "Thriller".
   3. Increase the number of copies for a specific book by 2.
   4. Delete books from the collection published before the year 2000.
   5. Display the book title and number of copies for the book with the maximum number of copies in the collection.

# Answer:

use libraryDB

db.createCollection("books")

db.books.insertMany([

{

title: "The Hound of the Baskervilles",

author: "Arthur Conan Doyle",

genre: "Mystery",

publication\_year: 1902,

availability: true,

copies: 5

},

{

title: "Gone Girl",

author: "Gillian Flynn",

genre: "Thriller",

publication\_year: 2012,

availability: true,

copies: 3

},

{

title: "The Girl with the Dragon Tattoo",

author: "Stieg Larsson",

genre: "Thriller",

publication\_year: 2005,

availability: false,

copies: 4

},

{

title: "1984",

author: "George Orwell",

genre: "Dystopian",

publication\_year: 1949,

availability: true,

copies: 7

},

{

title: "The Da Vinci Code",

author: "Dan Brown",

genre: "Mystery",

publication\_year: 2003,

availability: true,

copies: 6

}

])

print("Books in Mystery or Thriller genre:")

db.books.find({ genre: { $in: ["Mystery", "Thriller"] } }).forEach(printjson)

print("\nIncreasing copies of '1984' by 2")

db.books.updateOne(

{ title: "1984" },

{ $inc: { copies: 2 } }

)

print("\nDeleting books published before 2000")

db.books.deleteMany({ publication\_year: { $lt: 2000 } })

print("\nBook with the maximum number of copies:")

db.books.find().sort({ copies: -1 }).limit(1).forEach(function(doc) {

print("Title: " + doc.title + ", Copies: " + doc.copies)

})