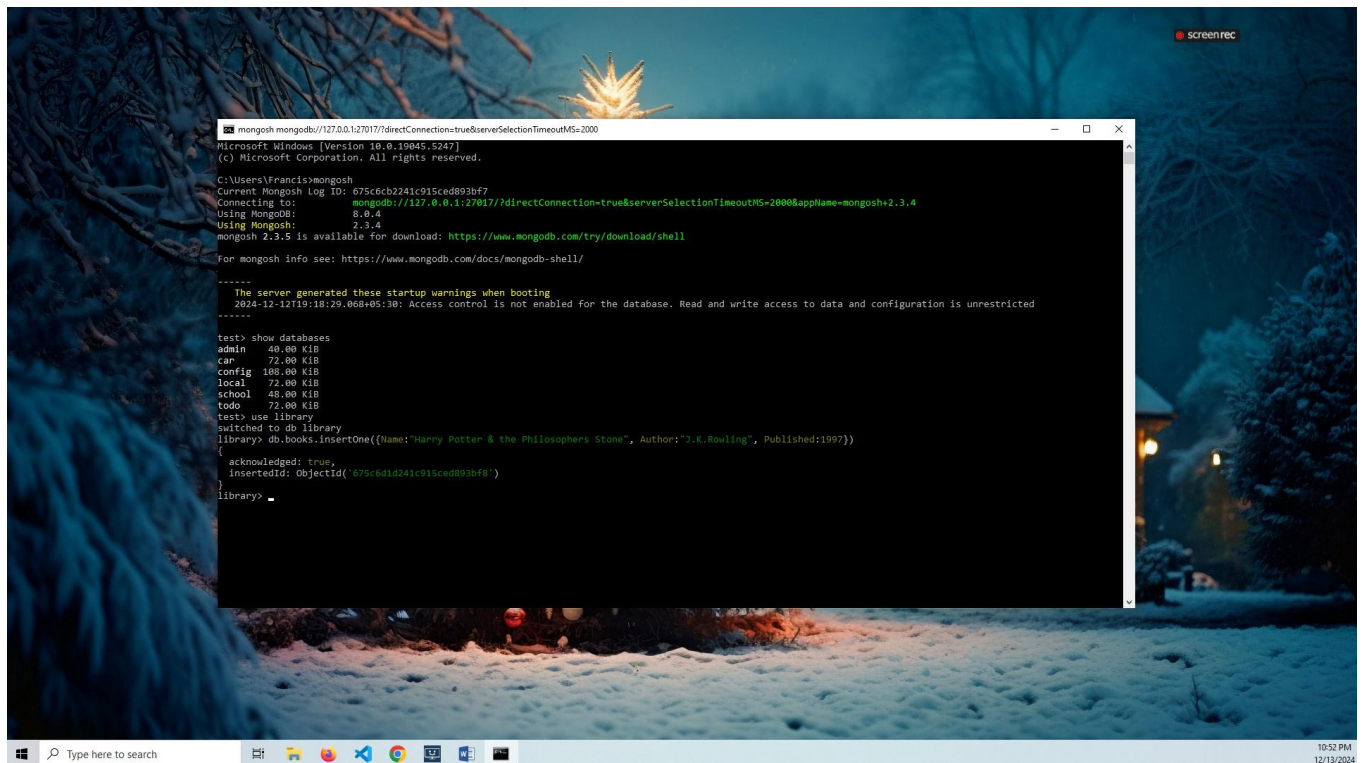


# MONGODB CRUD TASK

## 1. Create Operation:

1.1 Create a new database named "library" and switched to it.



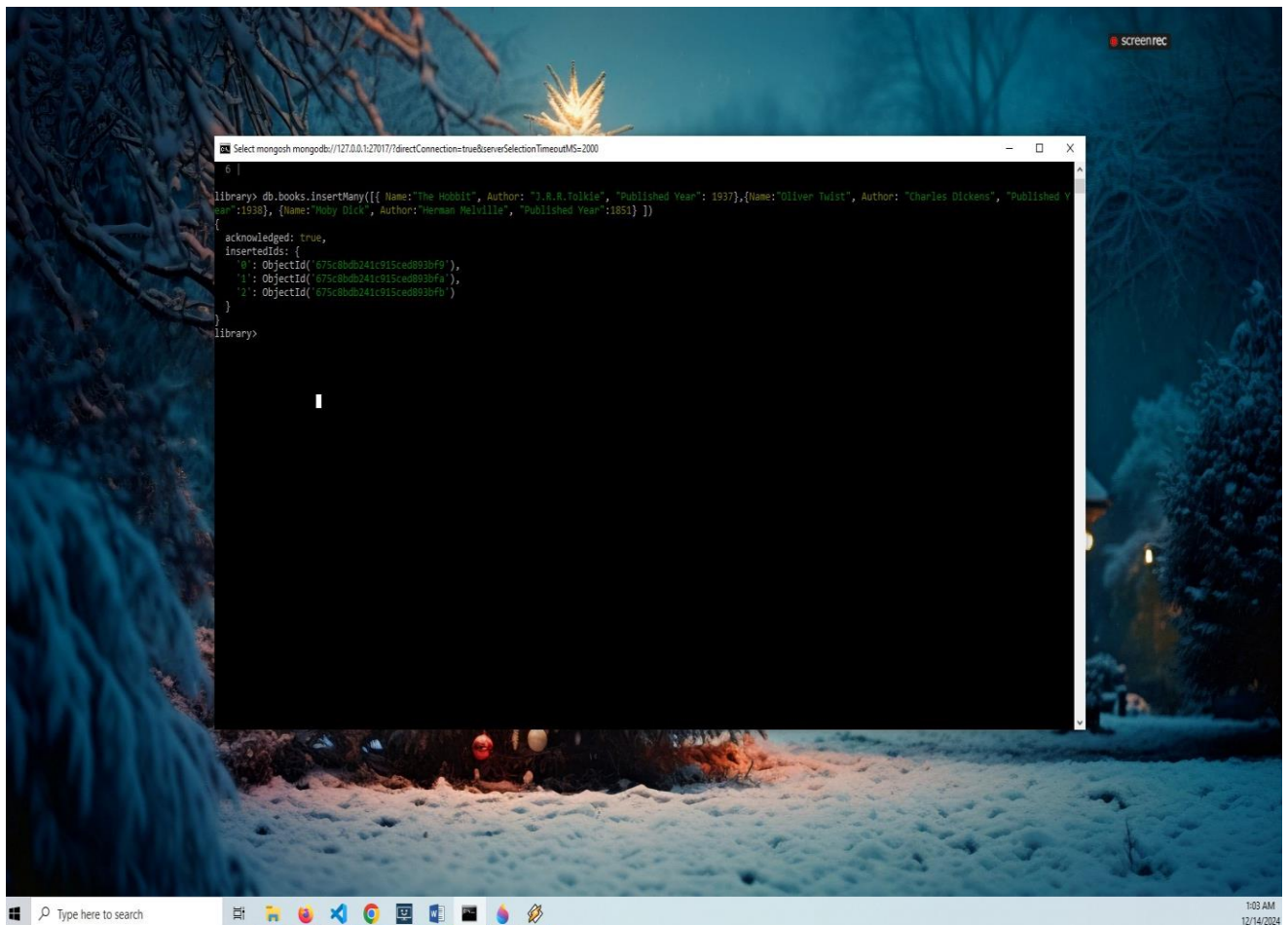
```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
Microsoft Windows [Version 10.0.19045.5247]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Francis>mongosh
Current Mongosh Log ID: 675c6cb2241c915ced893bf7
Connecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.3.4
Using MongoDB: 8.0.4
Using Mongosh: 2.3.4
mongosh 2.3.5 is available for download: https://www.mongodb.com/try/download/shell
For mongosh info see: https://www.mongodb.com/docs/mongodb-shell/

-----
The server generated these startup warnings when booting
2024-12-12T19:18:29.068+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
-----

test> show databases
admin          48.00 KiB
cal            72.00 KiB
config        108.00 KiB
local         72.00 KiB
school        48.00 KiB
todo          72.00 KiB
test> use library
switched to db library
library> db.books.insertOne({Name:"Harry Potter & the Philosophers Stone", Author:"J.K.Rowling", Published:1997})
{ acknowledged: true, insertedId: ObjectId("675c6d1d241c915ced893bf8") }
library>
```

1.2 Created a collection named "books" with fields: title, author, and published\_year.

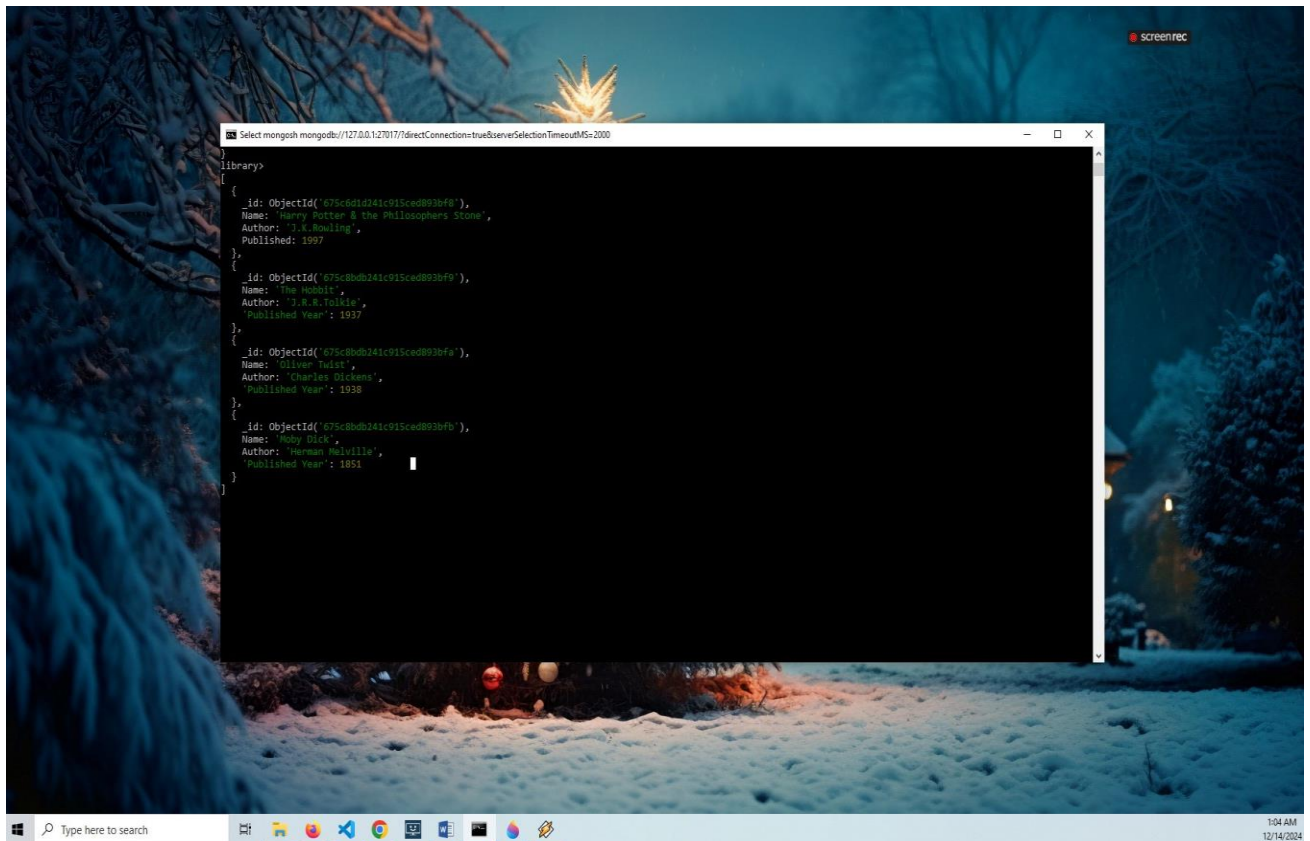


```
6 | Select mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
library> db.books.insertMany([ { Name: 'The Hobbit', Author: 'J.R.R. Tolkien', 'Published Year': 1937 }, { Name: 'Oliver Twist', Author: 'Charles Dickens', 'Published Year': 1938 }, { Name: 'Moby Dick', Author: 'Herman Melville', 'Published Year': 1851 } ])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('675c8bdb241c915ced893bf9'),
    '1': ObjectId('675c8bdb241c915ced893bfa'),
    '2': ObjectId('675c8bdb241c915ced893bfb')
  }
}
library>
```

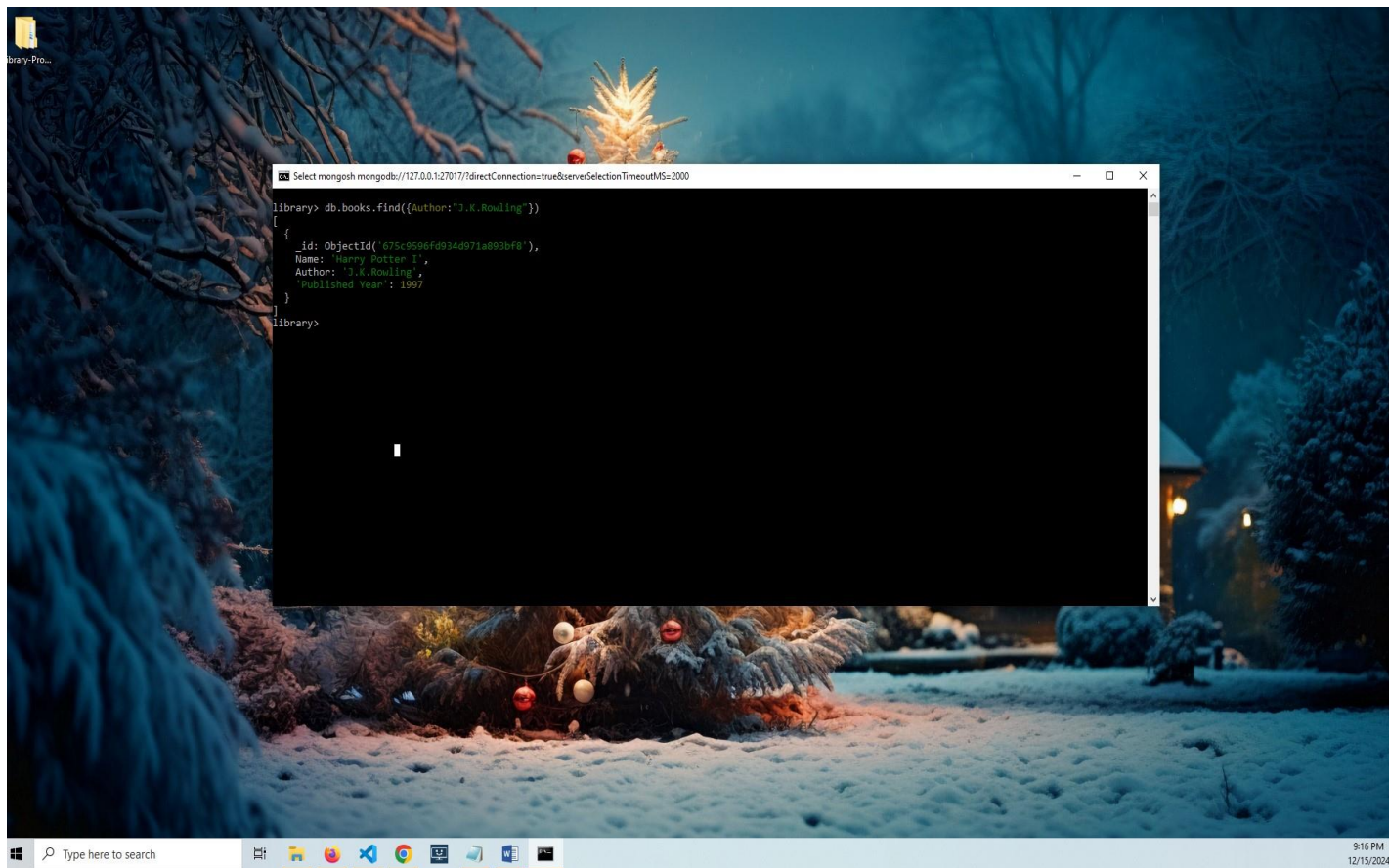
1:03 AM  
12/14/2024

## 2) Read Operation

2.1 Retrieved all documents from the "books" collection.

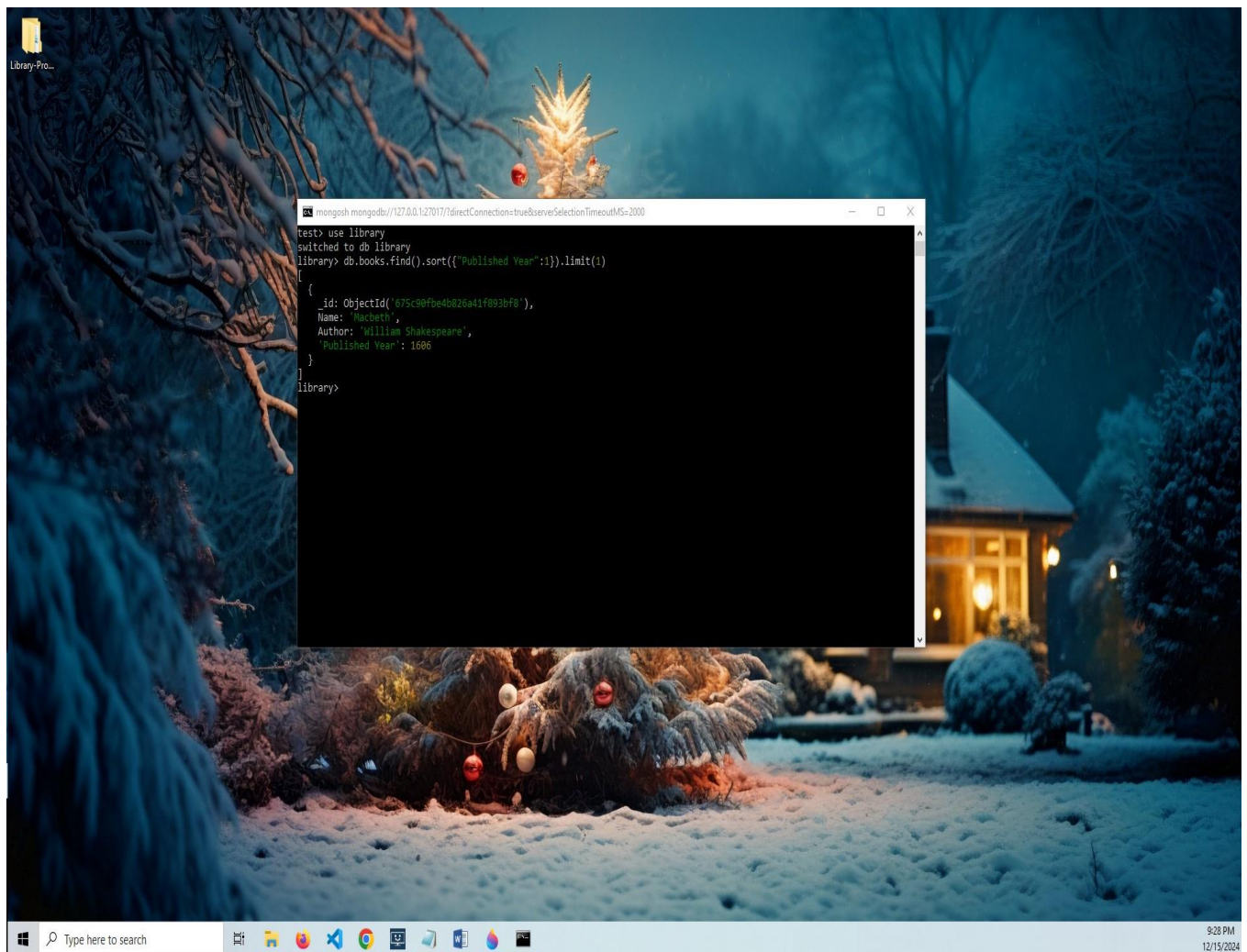


## 2.2 Find and display only the documents where the author is "J.K. Rowling".



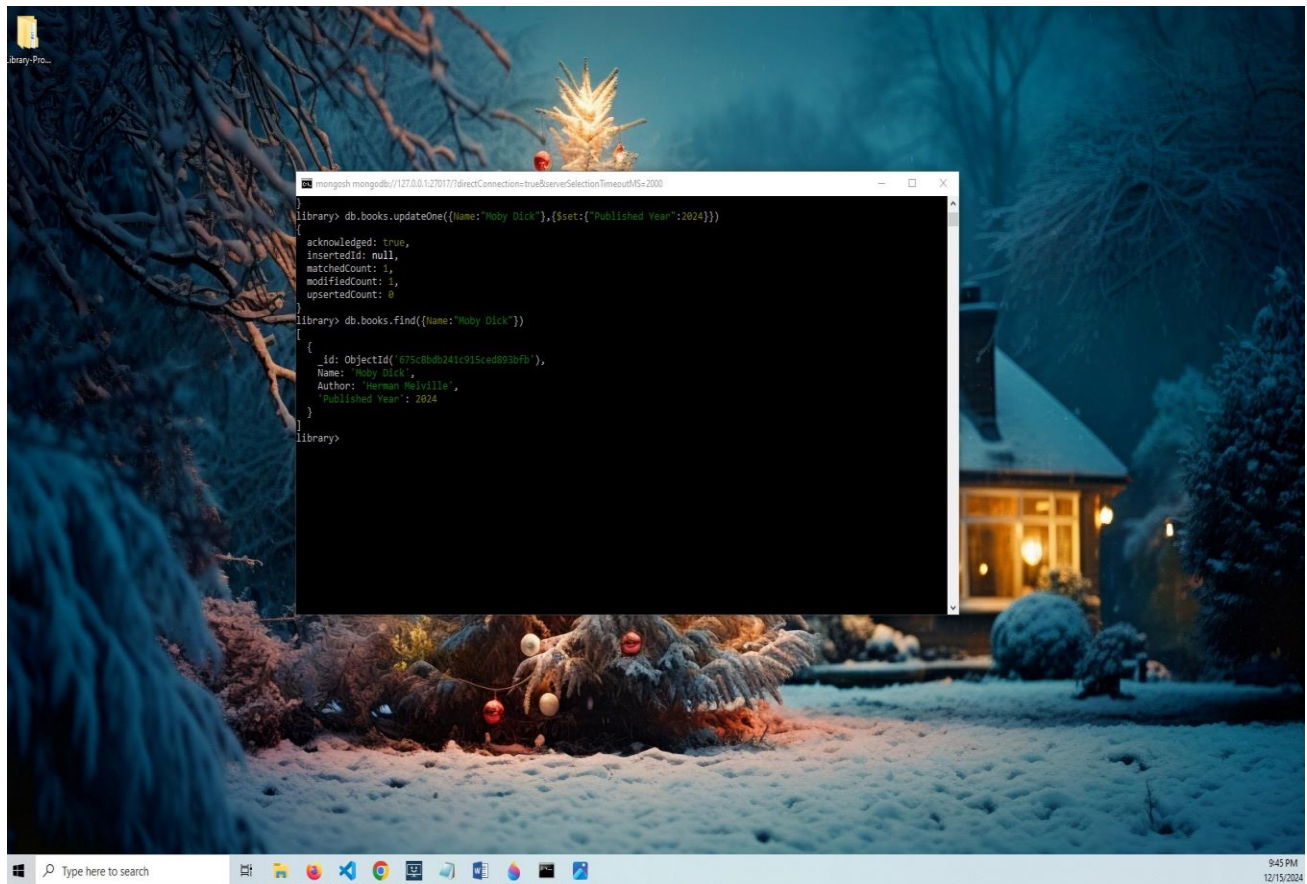


## 2.3 Fetch and display the document with the earliest published year.

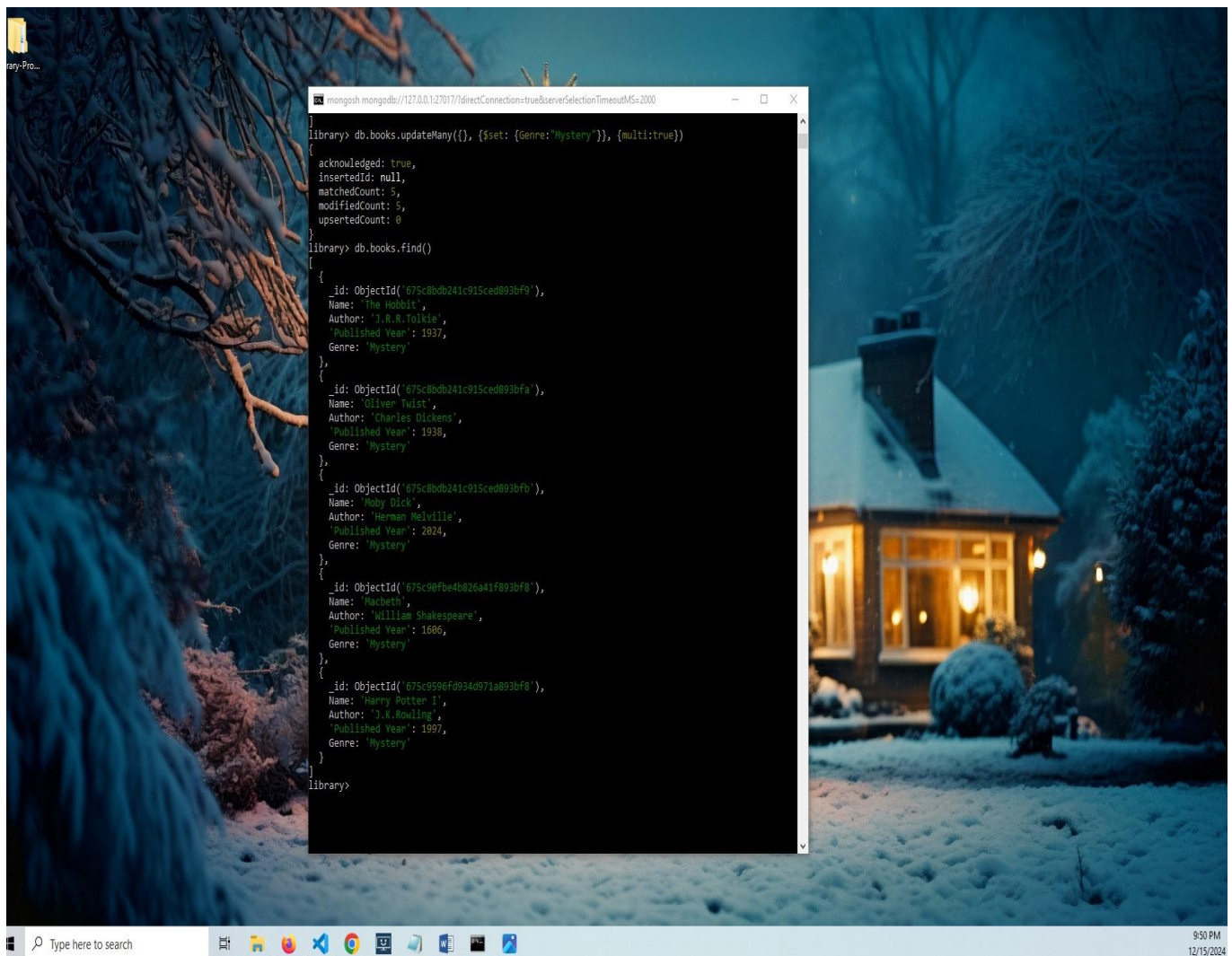


### 3. Update Operation:

3.1 Update the published year of the book to the **current year 2024**



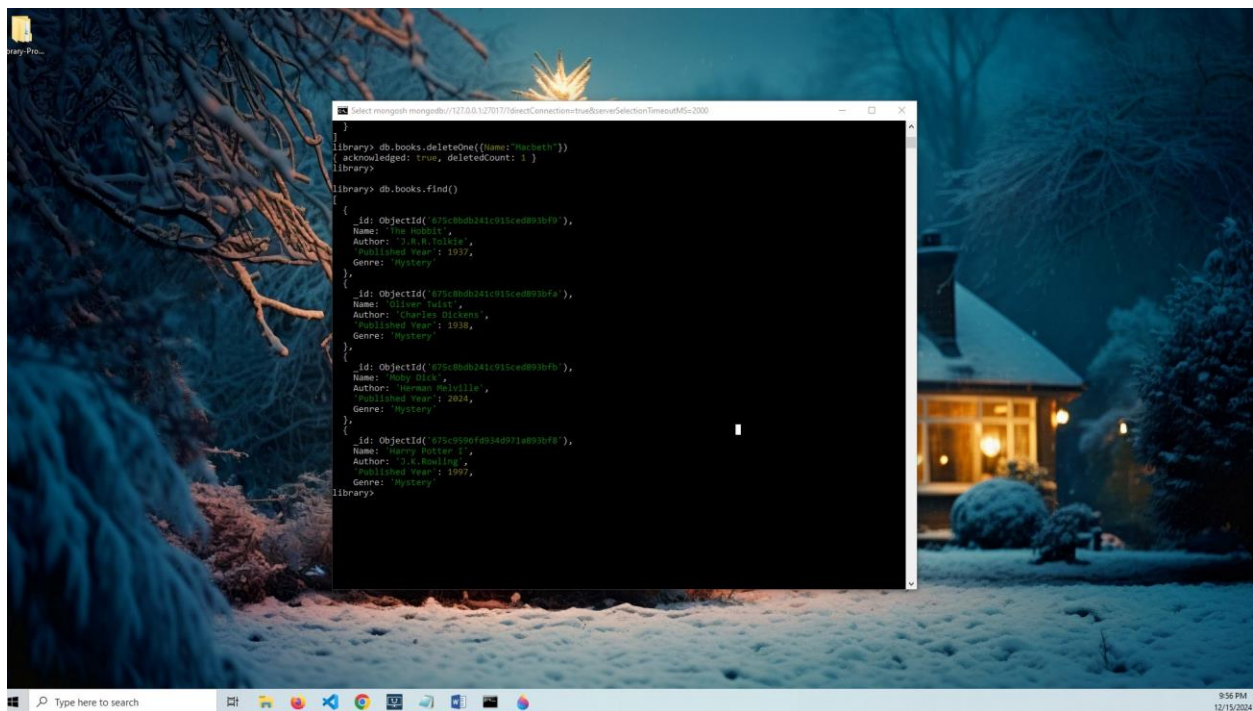
### 3.2 Added a new field "genre" with the value "Mystery" to all documents in the "books" collection.





## 4. Delete Operation:

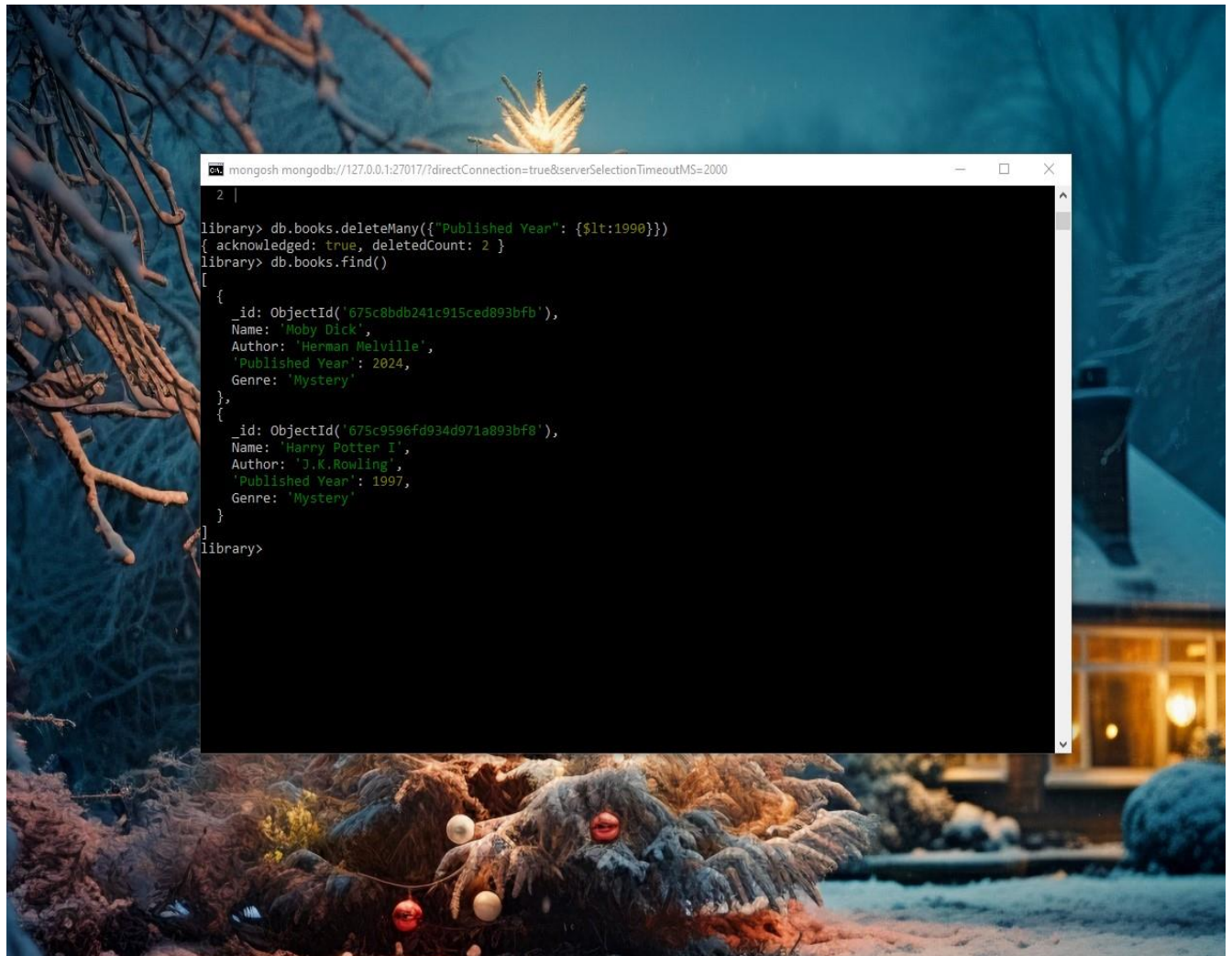
4.1 Remove the document with the title "**Macbeth**" from the "books" collection



```
select mongodb mongodb//127.0.0.1:27017?directConnection=true&serverSelectionTimeoutMS=2000
>
>
librarys db.books.deleteOne({Name:"Macbeth"})
{ acknowledged: true, deletedCount: 1 }
librarys
librarys db.books.find()
{
  "_id": ObjectId("675c8b0241c915ced893b4f9"),
  "Name": "The Hobbit",
  "Author": "J.R.R. Tolkien",
  "Published Year": 1937,
  "Genre": "Mystery"
},
{
  "_id": ObjectId("675c8b0241c915ced893b4fa"),
  "Name": "Oliver Twist",
  "Author": "Charles Dickens",
  "Published Year": 1938,
  "Genre": "Mystery"
},
{
  "_id": ObjectId("675c8b0241c915ced893b4fb"),
  "Name": "Pollyanna",
  "Author": "Herman Wiedellie",
  "Published Year": 2024,
  "Genre": "Mystery"
},
{
  "_id": ObjectId("675c9306f4934a071a893b4fc"),
  "Name": "Harry Potter 1",
  "Author": "J.K. Rowling",
  "Published Year": 1997,
  "Genre": "Mystery"
}
librarys
```



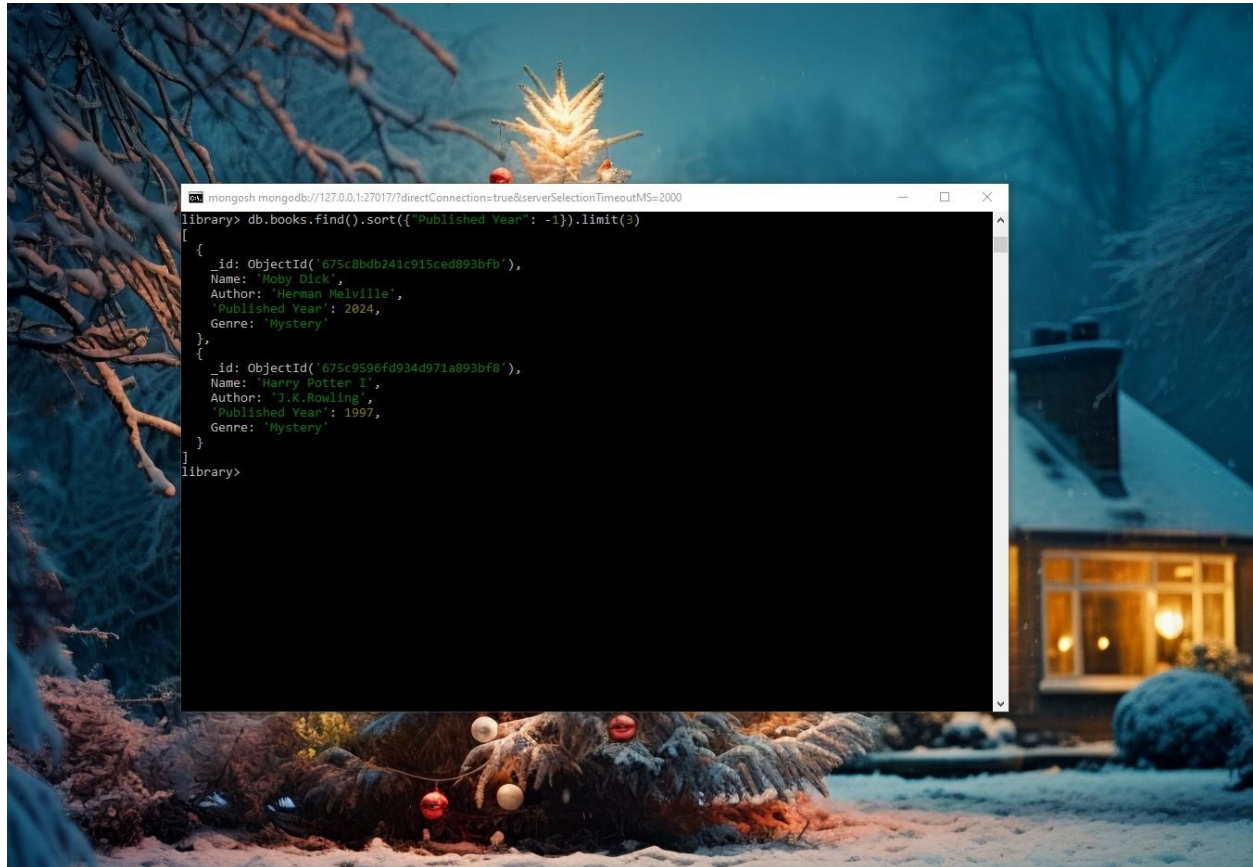
4.2 Deleted all documents from the "books" collection where the published year is before 1990.



## 5. Advanced Query:

5.1 Find and display the top 3 recently published books from the "books" collection.

```
library> db.books.find().sort({"Published Year": -1}).limit(3)
```



5.2 Retrieve documents from the "books" collection where the title contains the word "MongoDB" or "NoSQL".

