

Q1: Creating and Dropping Database & Collection

In Mongo Shell:

- **Create Database:**

use MyDatabase # Switch to a new database called MyDatabase

- **Create Collection:**

db.createCollection('Customers') # Creates the 'Customers' collection

- **Drop Collection:**

db.Customers.drop() # Drops the 'Customers' collection

- **Drop Database:**

db.dropDatabase() # Drops the current database

Q2: Insert a new document into "Customers"

In Mongo Shell:

```
db.Customers.insertOne({
  name: "John Doe",
  address: "123 Maple Street",
  email: "john@example.com",
  purchases: 200
})
```

Q3: Retrieve all documents from the "Customers" collection

In Mongo Shell:

```
db.Customers.find().pretty()
```

Q4: Update the address of a specific customer

In Mongo Shell:

```
db.Customers.updateOne(
  { name: "John Doe" }, # Filter condition
  { $set: { address: "456 Oak Avenue" } } # Update action
)
```

Q5: Query for customers who have made purchases over a certain amount

In Mongo Shell:

```
db.Customers.find({ purchases: { $gt: 100 } }).pretty()
```

Q6: Remove a customer from the "Customers" collection

In Mongo Shell:

```
db.Customers.deleteOne({ name: "John Doe" })
```

Q7: Create a new database named "SchoolDB"

In Mongo Shell:

use SchoolDB # Switch to the SchoolDB database

Q8: Insert documents into the "Students" collection

In Mongo Shell:

```
db.Students.insertMany([
  { name: "Alice", age: 14, grade: "8th" },
  { name: "Bob", age: 15, grade: "9th" },
  { name: "Charlie", age: 13, grade: "7th" }
])
```

Q9: Query for students older than a specific age or in a particular grade

In Mongo Shell:

```
db.Students.find({ $or: [{ age: { $gt: 14 } }, { grade: "9th" }] }).pretty()
```

Q10: Update the grade of a specific student

In Mongo Shell:

```
db.Students.updateOne(
  { name: "Alice" }, # Filter condition
  { $set: { grade: "9th" } } # Update action
)
```

Q11: Insert documents into the "Teachers" collection

In Mongo Shell:

```
db.Teachers.insertMany([
  { name: "Mrs. Smith", subject: "Math", experience: 10 },
  { name: "Mr. Johnson", subject: "Science", experience: 5 }
])
```

Q12: Query for teachers specializing in a specific subject or with more experience

In Mongo Shell:

```
db.Teachers.find({ $or: [{ subject: "Math" }, { experience: { $gt: 7 } }] }).pretty()
```

Q13: Update the experience of a specific teacher

In Mongo Shell:

```
db.Teachers.updateOne(
  { name: "Mr. Johnson" }, # Filter condition
  { $set: { experience: 6 } } # Update action
)
```

Task 1: Create a MongoDB Database "PWSKILLS"

In Mongo Shell:

```
use PWSKILLS
```

Task 2: Create "Employees" Collection & Insert Documents

In Mongo Shell:

```
db.Employees.insertMany([  
  { name: "Emma", position: "Manager", salary: 50000 },  
  { name: "Liam", position: "Developer", salary: 45000 },  
  { name: "Noah", position: "Designer", salary: 40000 }  
])
```

Task 3: Retrieve all documents from the "Employees" collection**In Mongo Shell:**

```
db.Employees.find().pretty()
```

Task 4: Drop the "Employees" Collection**In Mongo Shell:**

```
db.Employees.drop()
```

Task 5: Drop the "PWSKILLS" Database**In Mongo Shell:**

```
use PWSKILLS
```

```
db.dropDatabase()
```