creating department table

```
mysql> CREATE TABLE department (
-> dept_id INT PRIMARY KEY AUTO_INCREMENT,
-> dept_name VARCHAR(50) );

Query OK, 0 rows affected (0.01 sec)
```

creating year table

```
mysql> CREATE TABLE year (
-> year_id INT PRIMARY KEY AUTO_INCREMENT,
-> year_name VARCHAR(20) );

Query OK, 0 rows affected (0.01 sec)
```

Student should contain relationship to both department and year

```
mysql> CREATE TABLE students (
-> student_id INT PRIMARY KEY AUTO_INCREMENT,
-> student_name VARCHAR(50) ,
-> dept_id INT,
-> year_id INT,
-> FOREIGN KEY (dept_id) REFERENCES department(dept_id),
-> FOREIGN KEY (year_id) REFERENCES year(year_id));
Query OK, 0 rows affected (0.03 sec)
```

inserting values into student table

```
mysql> INSERT INTO students (student_name, dept_id, year_id) VALUES
-> ('Varun - CSE', 1, 1), ('Teja - CSE', 1, 2), ('Sai - CSE', 1, 3), ('Hari - CSE', 1, 4),
-> ('Pavan- ECE', 2, 1), ('Ram - ECE', 2, 2), ('Krishna - ECE', 2, 3), ('Tarun - ECE', 2, 4),
-> ('mahi - EE', 3, 1), ('virat - EE', 3, 2), ('kohli - EE', 3, 3), ('Sai - EE', 3, 4),

Query OK, 12 rows affected (0.00 sec)

Records: 12 Duplicates: 0 Warnings:
```

Displaying values of student table

```
mysql> select * from students;
+----+
| student id | student name | dept id | year id |
+-----+
| 1 | Varun - CSE | 1 | 1 |
| 2 | Teja - CSE | 1 | 2 |
| 3 | Sai - CSE | 1 | 3 |
| 4 | Hari - CSE | 1 | 4 |
| 5 | Pavan - ECE | 2 | 1 |
| 6 | Ram - ECE | 2 | 2 |
| 7 | Krishna - ECE | 2 | 3 |
| 8 | Tarun - ECE | 2 | 4 |
| 9 | mahi - EE | 3 | 1 |
| 10 | virat- EE | 3 | 2 |
| 11 | kohli - EE | 3 | 3 |
| 12 | Sai- EE | 3 | 4 |
```

write a query to display students from CSE department

mysql> SELECT students.student id, students.student name, department.dept name -> FROM students -> JOIN department ON students.dept_id = department.dept_id -> WHERE department.dept name = 'CSE'; +----+ | student_id | student_name | dept_name | +----+ | 1 | Varun - CSE | CSE | | 2 | Teja - CSE | CSE | | 3 | Sai - CSE | CSE | | 4 | Hari - CSE | CSE | +----+ 4 rows in set (0.01 sec write a query to display students sorted by dept and firstname mysql> SELECT students.student_id, students.student_name, department.dept_name -> FROM students -> JOIN department ON students.dept_id = department.dept_id -> ORDER BY department.dept_name, students.student_name; +----+ | student_id | student_name | dept_name | +----+ | 4 | Hari - CSE | CSE | | 3 | Sai - CSE | CSE |

```
| 2 | Teja - CSE | CSE |
| 1 | Varun - CSE | CSE |
| 7 | Krishna - ECE | ECE |
| 5 | Pavan - ECE | ECE |
| 6 | Ram - ECE | ECE |
| 8 | Tarun - ECE | ECE |
| 11 | kohli - EE | EE |
| 9 | mahi - EE | EE |
| 12 | Sai- EE | EE |
| 10 | virat- EE | EE |

12 rows in set (0.01 sec)
```

write a query to display only department name using student table

mysql> SELECT DISTINCT department.dept_name

-> FROM students

-> JOIN department ON students.dept_id = department.dept_id;

+-----+ | dept_name | +-----+ | CSE |

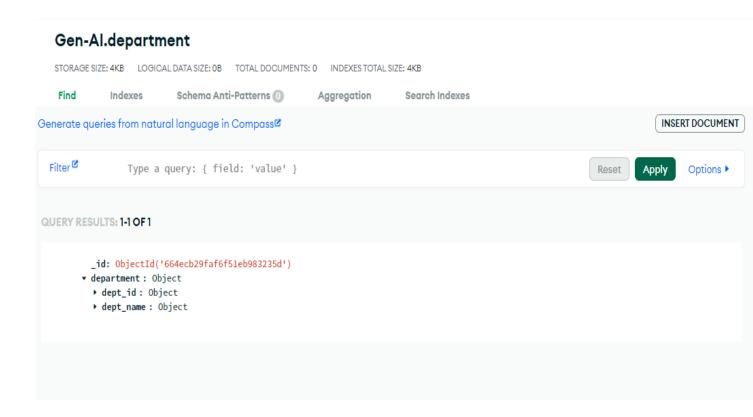
| EE |

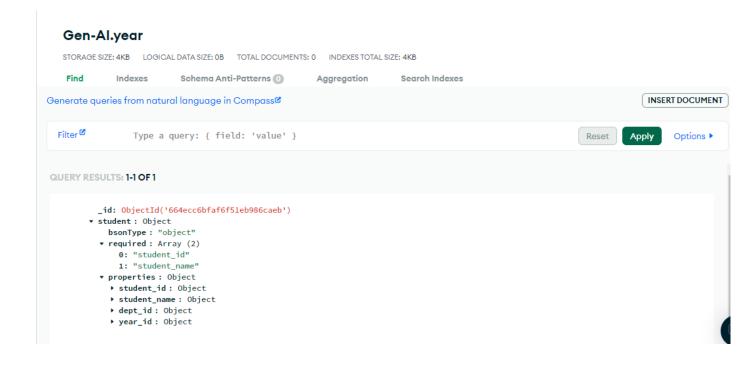
| ECE |

+----+

3 rows in set (0.00 sec)

Use chatgpt and ask like "this is my table in mysql how can i create same in mongodb





Gen-Al.students

STORAGE SIZE: 4KB LOGICAL DATA SIZE: 0B TOTAL DOCUMENTS: 0 INDEXES TOTAL SIZE: 4KB Find Indexes Schema Anti-Patterns ① Aggregation Search Indexes INSERT DOCUMENT Generate queries from natural language in Compass₫ Filter 🗗 Type a query: { field: 'value' } Reset Options > Apply QUERY RESULTS: 1-1 OF 1 _id: ObjectId('664ecbfbfaf6f5leb985891d')

• year: Object
bsonType: "object"

• required: Array (2) 0: "year_id" 1: "year_name" ▼ properties : Object year_id: Objectyear_name: Object