```
CREATE TABLE department (
    department_id INT AUTO_INCREMENT PRIMARY KEY,
    department_name VARCHAR(100) UNIQUE NOT NULL
);
CREATE TABLE year (
    year_id INT AUTO_INCREMENT PRIMARY KEY,
    year_name VARCHAR(50) UNIQUE NOT NULL
);
CREATE TABLE students (
    student_id INT AUTO_INCREMENT PRIMARY KEY,
    first_name VARCHAR(50) NOT NULL,
    last_name VARCHAR(50) NOT NULL,
    email VARCHAR(100) UNIQUE NOT NULL,
    department_id INT,
    year_id INT,
    FOREIGN KEY (department_id) REFERENCES department(department_id),
    FOREIGN KEY (year_id) REFERENCES year(year_id)
);


INSERT INTO department (department_name) VALUES ("CSE"),("EEE"),("Mech"),("Civil");
INSERT INTO year (year_name) VALUES ('III year'),('II year'),('I year'),('IV year');
INSERT INTO students (first_name, last_name, email, department_id, year_id) VALUES
('naveen', 'kumar', 'naveen@gmail.com', 1, 1),
('abhi', 'bale', 'abhi@gmail.com', 2,2),
('phani', 'naidu', 'phani@gmail.com', 3, 3),
('santhanam', 'pintu', 'santhanam@gmail.com', 4, 4);


SELECT * FROM department;
```

```
+---------------+-----------------+
| department_id | department_name |
+---------------+-----------------+
|             4 | Civil           |
|             1 | CSE             |
|             2 | EEE             |
|             3 | Mech            |
+---------------+-----------------+
```

SELECT * FROM year;

```
+---------+-----------+
| year_id | year_name |
+---------+-----------+
|       3 | I year    |
|       2 | II year   |
|       1 | III year  |
|       4 | IV year   |
+---------+-----------+
```

SELECT * FROM students;

```
+------------+------------+-----------+----------------------+---------------+---------+
| student_id | first_name | last_name | email                | department_id | year_id |
+------------+------------+-----------+----------------------+---------------+---------+
|          1 | naveen     | kumar     | naveen@gmail.com     |             1 |       1 |
|          2 | abhi       | bale      | abhi@gmail.com       |             2 |       2 |
|          3 | phani      | naidu     | phani@gmail.com      |             3 |       3 |
|          4 | santhanam  | pintu     | santhanam@gmail.com  |             4 |       4 |
+------------+------------+-----------+----------------------+---------------+---------+
```

SELECT students.student_id, students.first_name, students.last_name, students.email, department.department_name, year.year_name

 FROM students

 JOIN department ON students.department_id = department.department_id

 JOIN year ON students.year_id = year.year_id

  ORDER BY department.department_name, students.first_name, students.last_name;

```
+------------+------------+-----------+----------------------+-----------------+-----------+
| student_id | first_name | last_name | email                | department_name | year_name |
+------------+------------+-----------+----------------------+-----------------+-----------+
|          4 | santhanam  | pintu     | santhanam@gmail.com  | Civil           | IV year   |
|          1 | naveen     | kumar     | naveen@gmail.com     | CSE             | III year  |
|          2 | abhi       | bale      | abhi@gmail.com       | EEE             | II year   |
|          3 | phani      | naidu     | phani@gmail.com      | Mech            | I year    |
+------------+------------+-----------+----------------------+-----------------+-----------+
```

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STORAGE SIZE: 4KB   LOGICAL DATA SIZE: 0B   TOTAL DOCUMENTS: 0   INDEXES TOTAL SIZE: 4KB

Find   Indexes   Schema Anti-Patterns 0   Aggregation   Search Indexes

Generate queries from natural language in Compass⬈   INSERT DOCUMENT

Filter⬈   Type a query: { field: 'value' }   Reset   Apply   Options ▸

QUERY RESULTS: 1-3 OF 3

```
_id: ObjectId('664ec915dcc8866be54b483f')
department_id : 3
department_name : "EEE"
```

```
_id: ObjectId('664ec93edcc8866be54b5726')
department_id : 4
department_name : "Mech"
```

```
_id: ObjectId('664ec97cdcc8866be54b6d72')
department_id : 1
```

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Find   Indexes   Schema Anti-Patterns 0   Aggregation   Search Indexes

Generate queries from natural language in Compass⬈   INSERT DOCUMENT

Filter⬈   Type a query: { field: 'value' }   Reset   Apply   Options ▸

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('664ecbb7dcc8866be54c39ab')
year_name : "II year"
```

```
_id: ObjectId('664ecbb7dcc8866be54c39ac')
year_name : "I year"
```

📁 Project 0 ▾ ⋮ **Data Services** App Services Charts

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STORAGE SIZE: 36KB   LOGICAL DATA SIZE: 634B   TOTAL DOCUMENTS: 4   INDEXES TOTAL SIZE: 36KB

Find   Indexes   Schema Anti-Patterns ⓪   Aggregation   Search Indexes

Generate queries from natural language in Compass⧉   **INSERT DOCUMENT**

Filter⧉   Type a query: { field: 'value' }   Reset Apply Options ▸

QUERY RESULTS: **1-4 OF 4**

```
_id: ObjectId('664ec3dedcc8866be5496545')
student_id : 4
first_name : "santhanam"
last_name : "pintu"
email : "santhanam@gmail.com"
department_name : "Civil"
year_name : "IV year"
```

```
_id: ObjectId('664ec3f8dcc8866be5496db5')
student_id : 1
first_name : "naveen"
last_name : "kumar"
```