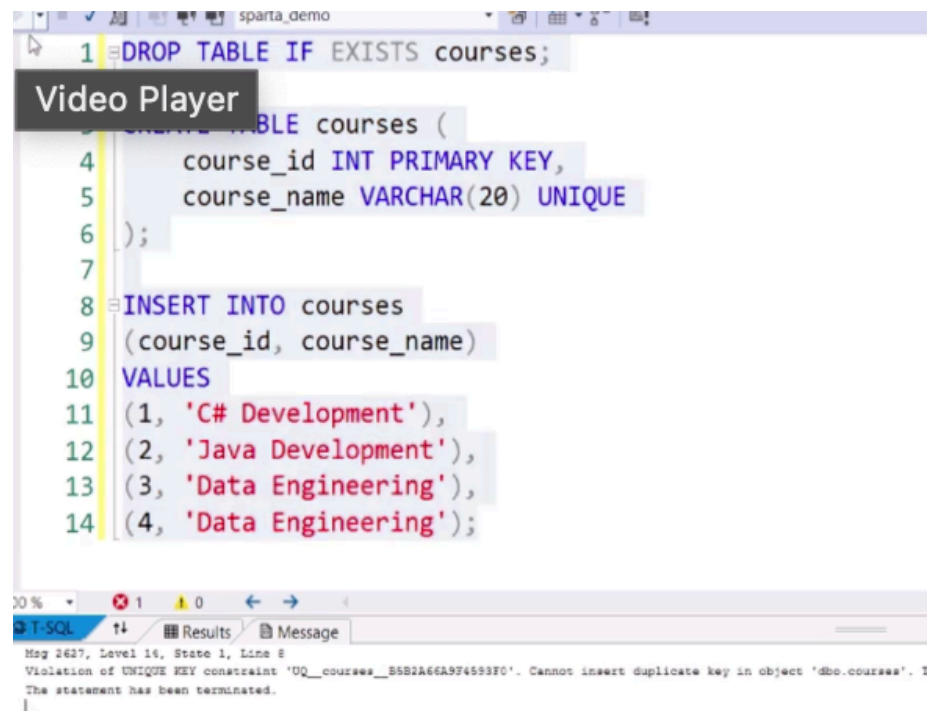


## 10. Primary & Foreign KEY

- PRIMARY KEY

```
1 DROP TABLE IF EXISTS courses;
2
3 CREATE TABLE courses (
4     course_id INT PRIMARY KEY,
5     course_name VARCHAR(20)
6 );
7
8 INSERT INTO courses
9 (course_id, course_name)
10 VALUES
11 (1, 'C# Development'),
12 (2, 'Java Development'),
13 (3, 'Data Engineering'),
14 (1, |
```

- UNIQUE



The screenshot shows a SQL Server Enterprise Manager window with a video player overlay. The video player is titled "Video Player" and shows a SQL script. The script is as follows:

```
1 DROP TABLE IF EXISTS courses;
2
3 CREATE TABLE courses (
4     course_id INT PRIMARY KEY,
5     course_name VARCHAR(20) UNIQUE
6 );
7
8 INSERT INTO courses
9 (course_id, course_name)
10 VALUES
11 (1, 'C# Development'),
12 (2, 'Java Development'),
13 (3, 'Data Engineering'),
14 (4, 'Data Engineering');
```

Below the script, a message box is displayed with the following text:

```
Msg 2627, Level 16, State 1, Line 8
Violation of UNIQUE KEY constraint 'UQ_courses__B5B2A66A974559F0'. Cannot insert duplicate key in object 'dbo.courses'.
The statement has been terminated.
```

'Data Engineering' repeats

- KEY IDENTITY(Starting, Increment)

```

1 DROP TABLE IF EXISTS courses;
2
3 CREATE TABLE courses (
4     course_id INT PRIMARY KEY IDENTITY(1000,10),
5     course_name VARCHAR(20) UNIQUE
6 );

```

Start at 1000, and adds 10 each time. You don't need to specify the Unique ID.

## FOREIGN KEY

```

11 ('Java Development'),
12 ('Data Engineering');
13
14
15 DROP TABLE IF EXISTS students;
16 CREATE TABLE students (
17     student_id INT PRIMARY KEY IDENTITY(1,1),
18     student_name VARCHAR(20),
19     course_id INT FOREIGN KEY REFERENCES courses (course_id)
20 );
21
22

```

## UPDATING TABLES

- ALTER TABLE
- ALTER COLUMN DATATYPE

```

SQLQuery5.sql
1 ALTER TABLE films
2 ADD budget DECIMAL(10,0), synopsis VARCHAR(200);
3
4 ALTER TABLE films
5 ALTER COLUMN runtime_mins DECIMAL(5,2);
6
7 ALTER TABLE films
8 DROP COLUMN box_office_usd;

```

- UPDATE

- DELETE

```
23  
24 =DELETE FROM ice_cream  
25 WHERE flavour = 'Raspberry Ripple'  
26 -- WHERE id = 3
```