# The database schema for the Learning System:

## 1. SubscriptionPlans

This table defines different subscription plans available for users.

- PlanID: Unique identifier for each subscription plan.
- PlanName: Name of the subscription plan (e.g., Basic, Premium).
- **Price**: Cost of the subscription plan.
- MaxCourses: Maximum number of courses a user can enroll in under this plan.
- **IsCertificationIncluded**: Indicates whether certification is included with the plan (Boolean).
- AccessType: Describes the type of access granted (e.g., full, limited).
- MaxProfiles: Maximum number of user profiles that can be created under this plan.

#### 2. Users

This table stores information about users of the learning system.

- UserID: Unique identifier for each user.
- SubscriptionPlanID: References the subscription plan the user is subscribed to.
- Fname: User's first name.
- Lname: User's last name.
- Email: Unique email address of the user.
- Password: Encrypted password for user authentication.
- **DateJoined**: Date when the user joined the system.
- IsActive: Indicates whether the user account is active (default is active).

#### 3. Instructors

This table holds details about instructors who teach courses.

- **InstructorID**: Unique identifier for each instructor.
- FullName: The full name of the instructor.
- Email: Unique email address for the instructor.
- **Specialization**: Area of expertise or specialization of the instructor.

### 4. Courses

This table contains information about courses offered in the learning system.

- CourseID: Unique identifier for each course.
- InstructorID: References the instructor teaching the course.
- CourseTitle: Title of the course.

- **Description**: Brief description of the course content.
- Category: Category under which the course falls (e.g., Science, Arts).
- **Duration**: Duration of the course in hours or days.
- **Certification**: Indicates whether a certificate is awarded upon course completion (Boolean).

## 5. Modules

This table represents modules within courses, which are smaller sections of a course.

- ModuleID: Unique identifier for each module.
- CourseID: References the course to which the module belongs.
- ModuleName: Name of the module.
- **Description**: Description of the module's content.

## 6. Quizzes

This table stores information about quizzes associated with modules.

- QuizID: Unique identifier for each quiz.
- ModuleID: References the module to which the quiz belongs.
- QuizTitle: Title of the quiz.
- QuizContent: Content or questions of the quiz.
- MaxScore: Maximum score that can be obtained in the quiz.

## 7. Assignments

This table contains assignments that users must complete within modules.

- AssignmentID: Unique identifier for each assignment.
- ModuleID: References the module to which the assignment belongs.
- AssignmentTitle: Title of the assignment.
- **Description**: Brief description of the assignment.
- **DueDate**: Deadline for submitting the assignment.

#### 8. Lessons

This table represents individual lessons within modules.

- LessonID: Unique identifier for each lesson.
- ModuleID: References the module to which the lesson belongs.
- LessonTitle: Title of the lesson.
- **LessonType**: Type of lesson (e.g., video, text).

# 9. MarketingCampaigns

This table holds information about marketing campaigns to promote the learning system.

• CampaignID: Unique identifier for each marketing campaign.

- CampaignName: Name of the campaign.
- StartDate: Date the campaign starts.
- EndDate: Date the campaign ends.
- **DiscountPercentage**: Percentage discount offered during the campaign.
- TargetAudience: Description of the audience targeted by the campaign.
- **Details**: Additional details about the campaign.

## 10. Payments

This table records payments made by users for their subscriptions.

- PaymentID: Unique identifier for each payment.
- UserID: References the user making the payment.
- **PlanID**: References the subscription plan associated with the payment.
- Amount: Amount paid by the user.
- PaymentDate: Date when the payment was made.
- PaymentStatus: Status of the payment (e.g., completed, pending).
- CampaignID: Optional reference to a marketing campaign if applicable.

## 11. Progress

This table tracks the progress of users in courses and lessons.

- **ProgressID**: Unique identifier for each progress record.
- **ProfileID**: References the user profile associated with the progress.
- CourseID: References the course in which the progress is tracked.
- LessonID: References the lesson associated with the progress.
- **Status**: Status of the user's progress (e.g., in progress, completed).

## 12. Certificates

This table records certificates issued to users upon course completion.

- **CertificateID**: Unique identifier for each certificate.
- **ProfileID**: References the user who received the certificate.
- CourseID: References the course for which the certificate is issued.
- **DateIssued**: Date when the certificate was issued.
- URL: URL link to access the certificate online.

#### 13. EvaluationResults

This table stores evaluation results of users on lessons.

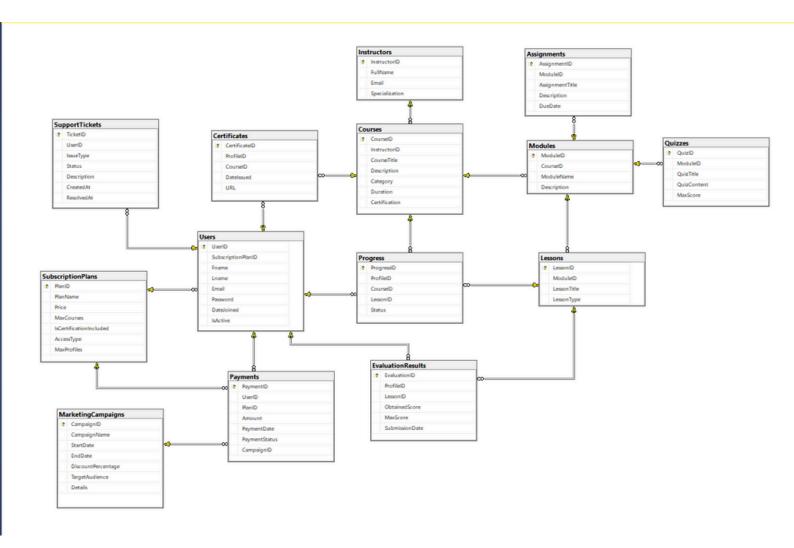
- **EvaluationID**: Unique identifier for each evaluation record.
- **ProfileID**: References the user who completed the evaluation.
- LessonID: References the lesson associated with the evaluation.
- **ObtainedScore**: Score obtained by the user in the evaluation.
- MaxScore: Maximum possible score for the evaluation.

• **SubmissionDate**: Date when the evaluation was submitted.

## 14. SupportTickets

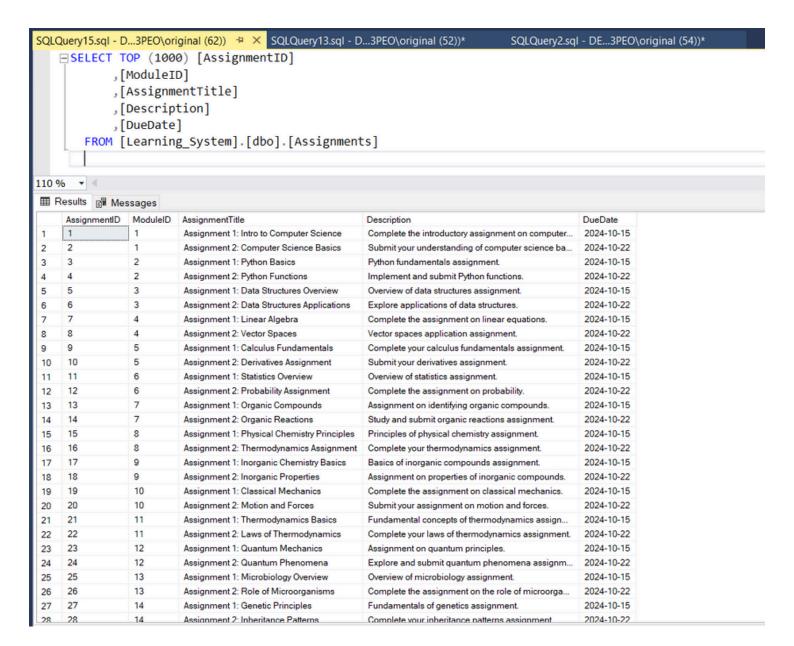
This table manages support tickets submitted by users for assistance.

- TicketID: Unique identifier for each support ticket.
- UserID: References the user who submitted the ticket.
- IssueType: Type of issue reported (e.g., technical, billing).
- Status: Current status of the ticket (e.g., open, resolved).
- **Description**: Detailed description of the issue.
- CreatedAt: Date when the ticket was created.
- **ResolvedAt**: Date when the ticket was resolved (nullable).



## A snippet of the populated tables:

## 1-Assignments



#### 2-Certificates

```
SELECT TOP (1000) [CertificateID]
,[ProfileID]
,[CourseID]
,[DateIssued]
,[URL]
FROM [Learning_System].[dbo].[Certificates]
```

110 % ▼ ■ Results ■ Messages

	CertificateID	ProfileID	CourseID	DateIssued	URL
1	1	10	50	2023-01-01	http://example.com/certificates/1
2	2	22	35	2023-01-02	http://example.com/certificates/2
3	3	33	47	2023-01-03	http://example.com/certificates/3
4	4	45	60	2023-01-04	http://example.com/certificates/4
5	5	51	12	2023-01-05	http://example.com/certificates/5
6	6	67	70	2023-01-06	http://example.com/certificates/6
7	7	78	20	2023-01-07	http://example.com/certificates/7
8	8	81	55	2023-01-08	http://example.com/certificates/8
9	9	2	90	2023-01-09	http://example.com/certificates/9
10	10	99	40	2023-01-10	http://example.com/certificates/10
11	11	12	22	2023-01-11	http://example.com/certificates/11
12	12	14	1	2023-01-12	http://example.com/certificates/12
13	13	15	88	2023-01-13	http://example.com/certificates/13
14	14	18	3	2023-01-14	http://example.com/certificates/14
15	15	29	86	2023-01-15	http://example.com/certificates/15
16	16	30	15	2023-01-16	http://example.com/certificates/16
17	17	31	54	2023-01-17	http://example.com/certificates/17
18	18	37	28	2023-01-18	http://example.com/certificates/18

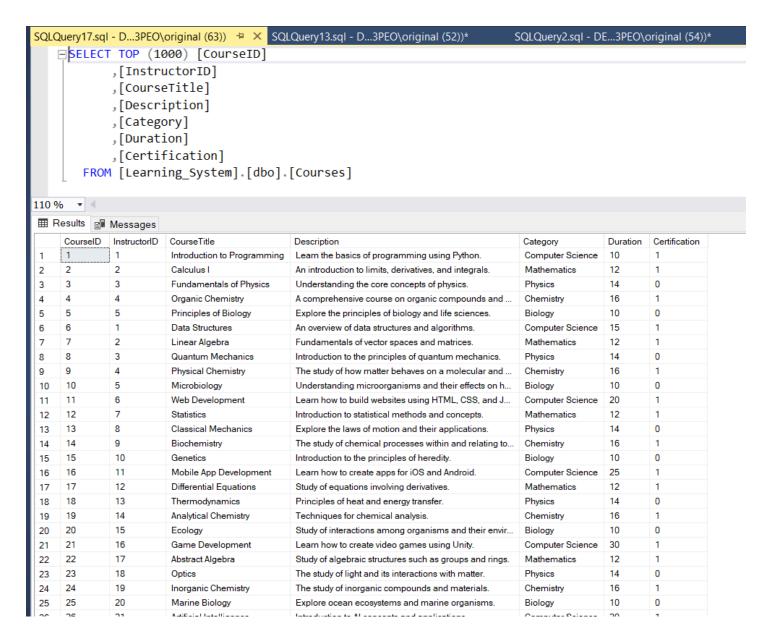
```
SELECT TOP (1000) [CertificateID]
                  ,[ProfileID]
                  ,[CourseID]
                  ,[DateIssued]
                  , [URL]
           FROM [Learning System].[dbo].[Certificates]
110 %
         ▼ 4

    ⊞ Results

    Messages

                                                        URL
       CertificateID
                     ProfileID
                               CourselD
                                          Datelssued
                                50
                     10
                                           2023-01-01
                                                        http://example.com/certificates/1
 1
       1
 2
       2
                     22
                                35
                                           2023-01-02
                                                        http://example.com/certificates/2
       3
 3
                     33
                                47
                                           2023-01-03
                                                        http://example.com/certificates/3
 4
       4
                     45
                                60
                                           2023-01-04
                                                        http://example.com/certificates/4
 5
       5
                     51
                                12
                                           2023-01-05
                                                        http://example.com/certificates/5
       6
                     67
                                70
 6
                                           2023-01-06
                                                        http://example.com/certificates/6
 7
       7
                                                        http://example.com/certificates/7
                     78
                                20
                                           2023-01-07
       8
                     81
 8
                                55
                                           2023-01-08
                                                        http://example.com/certificates/8
       9
                     2
                                90
                                                        http://example.com/certificates/9
 9
                                           2023-01-09
                     99
                                40
                                                        http://example.com/certificates/10
 10
       10
                                           2023-01-10
                                22
                                                        http://example.com/certificates/11
       11
                     12
                                           2023-01-11
 11
                                1
                                                        http://example.com/certificates/12
 12
       12
                     14
                                           2023-01-12
                                88
                                                        http://example.com/certificates/13
 13
       13
                     15
                                           2023-01-13
                                3
       14
                     18
                                           2023-01-14
                                                        http://example.com/certificates/14
 14
                                           2023-01-15
                     29
                                86
                                                        http://example.com/certificates/15
 15
       15
                     30
                                15
                                           2023-01-16
                                                        http://example.com/certificates/16
 16
       16
       17
                     31
                                54
                                           2023-01-17
                                                        http://example.com/certificates/17
 17
       18
                     37
                                28
                                           2023-01-18
                                                        http://example.com/certificates/18
 18
```

3-Courses



#### 4-EvaluationResults

```
□SELECT TOP (1000) [EvaluationID]
                ,[ProfileID]
                ,[LessonID]
                ,[ObtainedScore]
                ,[MaxScore]
                ,[SubmissionDate]
          FROM [Learning_System].[dbo].[EvaluationResults]
110 %
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    ⊞ Results

           EvaluationID
                   ProfileID
                            LessonID
                                      ObtainedScore
                                                    MaxScore
                                                               SubmissionDate
                                      85.00
                                                     100
                                                               2023-01-01
                            1
                                                               2023-01-02
      2
                   2
                            1
                                      90.00
                                                     100
 2
      3
                   3
                            2
                                                               2023-01-03
 3
                                      75.50
                                                     100
      4
                   4
                            2
                                      88.00
                                                     100
                                                               2023-01-04
 4
                   5
                            3
 5
      5
                                      67.00
                                                     100
                                                               2023-01-05
 6
      6
                   6
                            3
                                      92.50
                                                               2023-01-06
                                                     100
                   7
 7
      7
                            4
                                      78.00
                                                     100
                                                               2023-01-07
      8
                   8
                            4
                                                               2023-01-08
                                      80.25
                                                     100
 8
      9
                   9
                            5
                                                               2023-01-09
 9
                                      91.75
                                                     100
                            5
 10
      10
                   10
                                      83.00
                                                     100
                                                               2023-01-10
      11
                   11
                            6
                                      70.00
                                                     100
                                                               2023-01-11
 11
 12
      12
                   12
                            6
                                      85.50
                                                     100
                                                               2023-01-12
                   13
                            7
                                                               2023-01-13
      13
                                      66.75
                                                     100
 13
                            7
      14
                   14
                                      88.00
                                                     100
                                                               2023-01-14
 14
                            8
                                                               2023-01-15
 15
      15
                   15
                                      95.00
                                                     100
                   16
                            8
                                      82.25
                                                     100
                                                               2023-01-16
 16
      16
                            9
 17
      17
                   17
                                      77.00
                                                     100
                                                               2023-01-17
                            9
      18
                   18
                                      89.50
                                                     100
                                                               2023-01-18
 18
 19
      19
                   19
                            10
                                      80.00
                                                     100
                                                               2023-01-19
                   20
                                      90.00
                                                     100
                                                               2023-01-20
      20
                            10
 20
      21
                   21
                            11
                                      68.00
                                                     100
                                                               2023-01-21
```

#### 5-Instructor

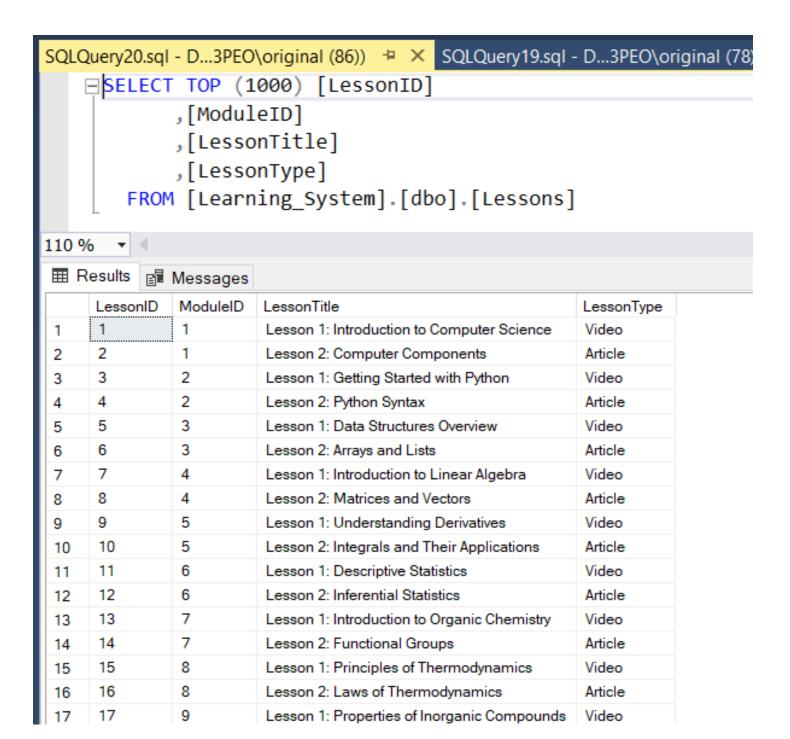
```
SQLQuery19.sql - D...3PEO\original (78)) + X SQLQuery18.sql - D...3PEO\original (82))
     SELECT TOP (1000) [InstructorID]
                ,[FullName]
                ,[Email]
                ,[Specialization]
          FROM [Learning_System].[dbo].[Instructors]
110 %

    ⊞ Results

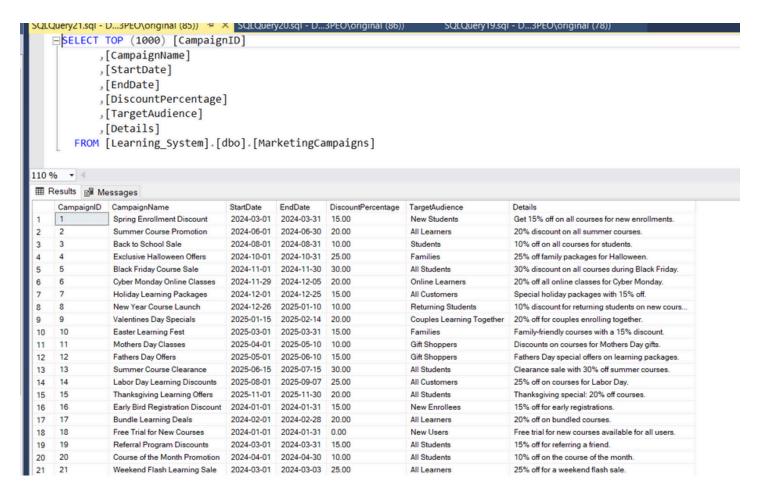
    Messages

      InstructorID
                  FullName
                                       Email
                                                                    Specialization
                   Dr. Alice Smith
                                       alice.smith@example.com
                                                                     Computer Science
 1
                   Prof. Bob Johnson
                                       bob.johnson@example.com
                                                                     Mathematics
 2
      2
      3
 3
                   Ms. Carol Williams
                                       carol.williams@example.com
                                                                     Physics
                   Mr. David Brown
 4
      4
                                       david.brown@example.com
                                                                     Chemistry
                   Dr. Emma Davis
      5
                                       emma.davis@example.com
 5
                                                                     Biology
                   Dr. Frank Wilson
 6
      6
                                       frank.wilson@example.com
                                                                     Computer Science
      7
                   Ms. Grace Moore
                                       grace.moore@example.com
                                                                     Mathematics
 7
      8
                   Mr. Henry Taylor
                                       henry.taylor@example.com
                                                                     Physics
 8
      9
                   Prof. Irene Anderson
                                       irene.anderson@example.com
                                                                     Chemistry
                   Dr. Jack Thomas
      10
                                       jack.thomas@example.com
                                                                     Biology
 10
      11
                   Ms. Karen Jackson
                                       karen.jackson@example.com
                                                                     Computer Science
 11
                   Mr. Leo White
 12
      12
                                       leo.white@example.com
                                                                     Mathematics
      13
                   Dr. Mike Harris
                                       mike.harris@example.com
                                                                     Physics
 13
      14
                   Prof. Nancy Martin
                                       nancy.martin@example.com
                                                                     Chemistry
 14
      15
                   Ms. Olivia Thompson
                                       olivia.thompson@example.com
 15
                                                                     Biology
      16
                   Dr. Paul Garcia
                                       paul.garcia@example.com
                                                                     Computer Science
```

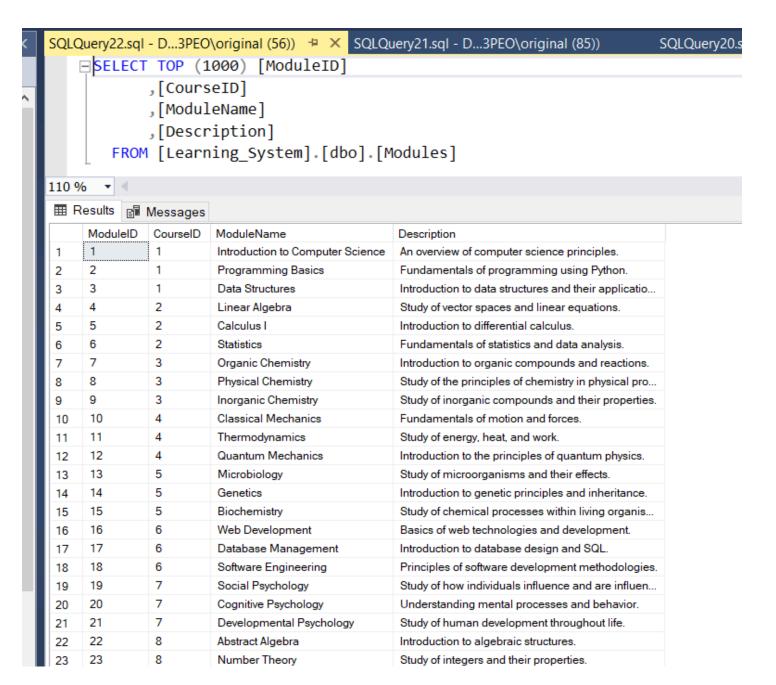
6-Lessons



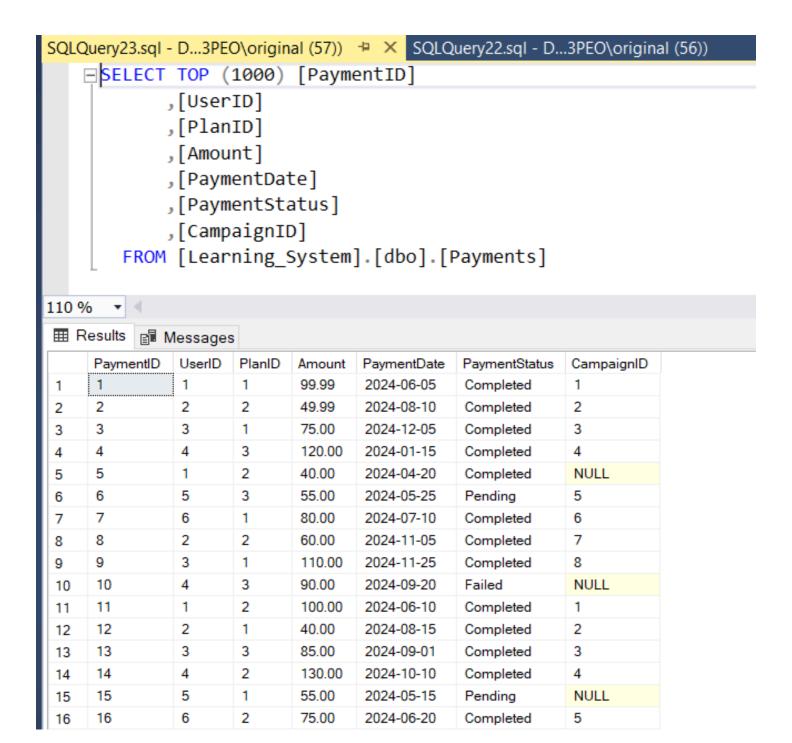
7-MarketingCampaings



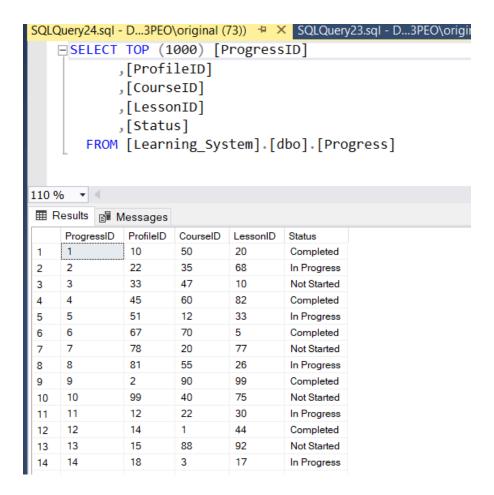
#### 8-Modules



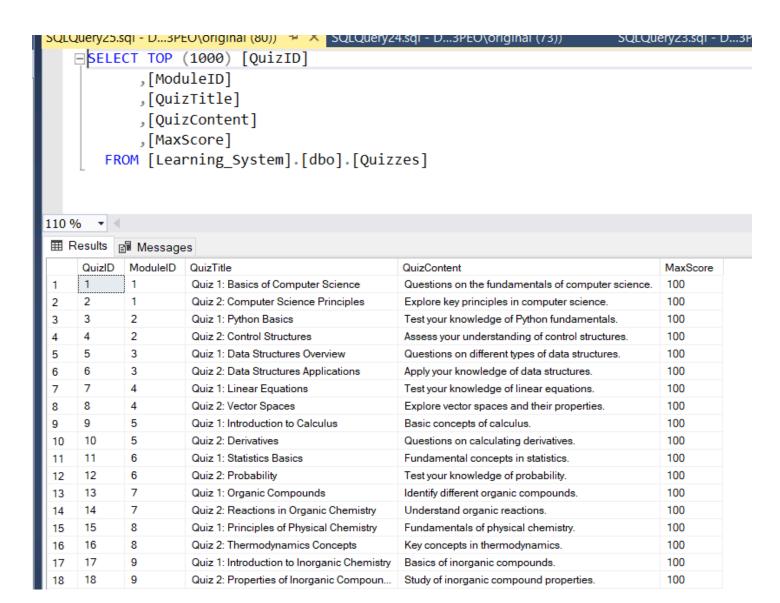
## 9-Payments



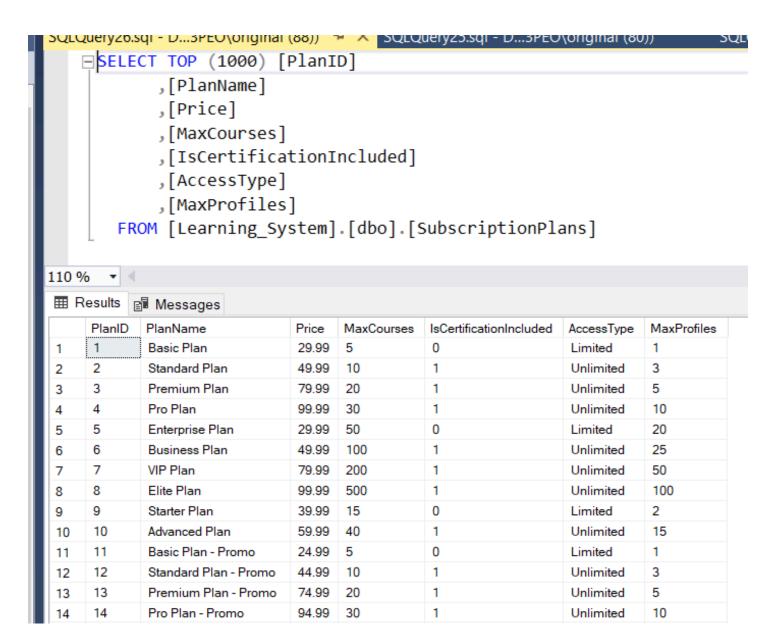
10-Progress



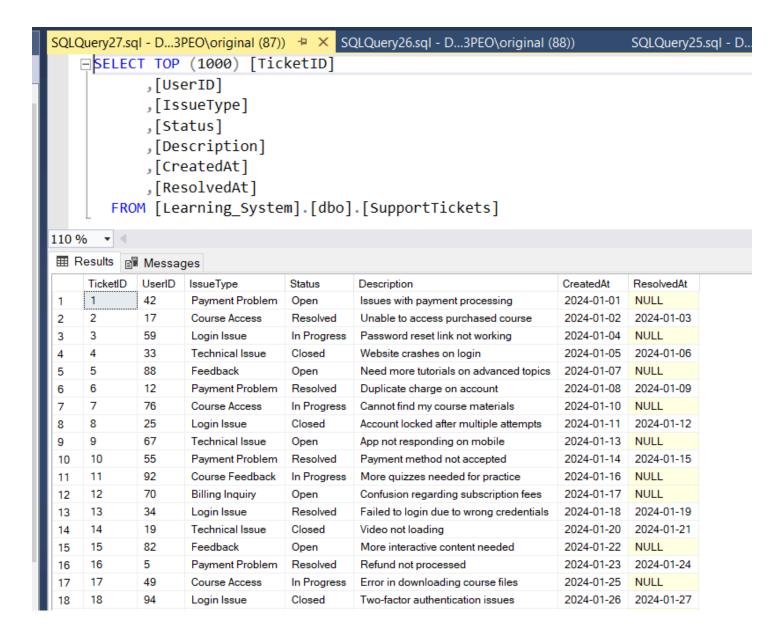
## 11-Quizzes



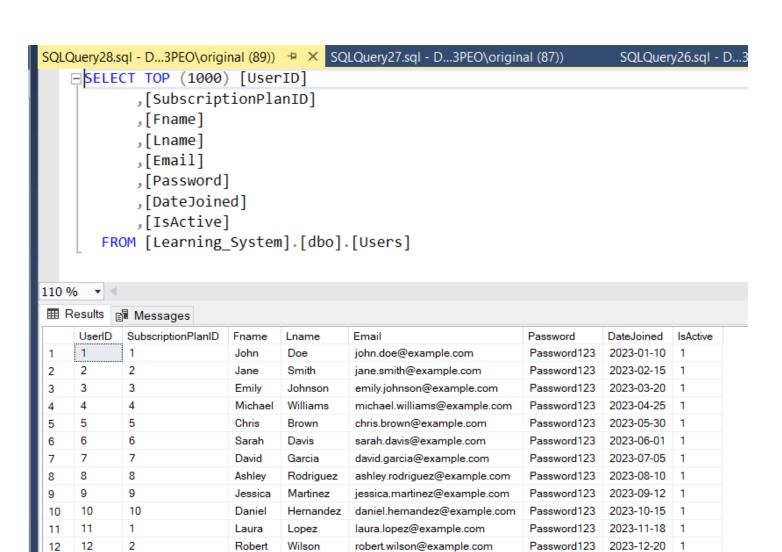
## 12-SubscriptionPlans



## 13-SupportTickets



#### 14-Users



megan.anderson@example.com

james.thomas@example.com

rachel.taylor@example.com

Password123

Password123

Password123 2024-02-28

2024-01-25

2024-03-30

1

1

3

4

5

Megan

James

Rachel

Anderson

Thomas

Taylor

13

14 15 13

14

15