



Practical 01 – Create Database and Tables

Objectives of this practical

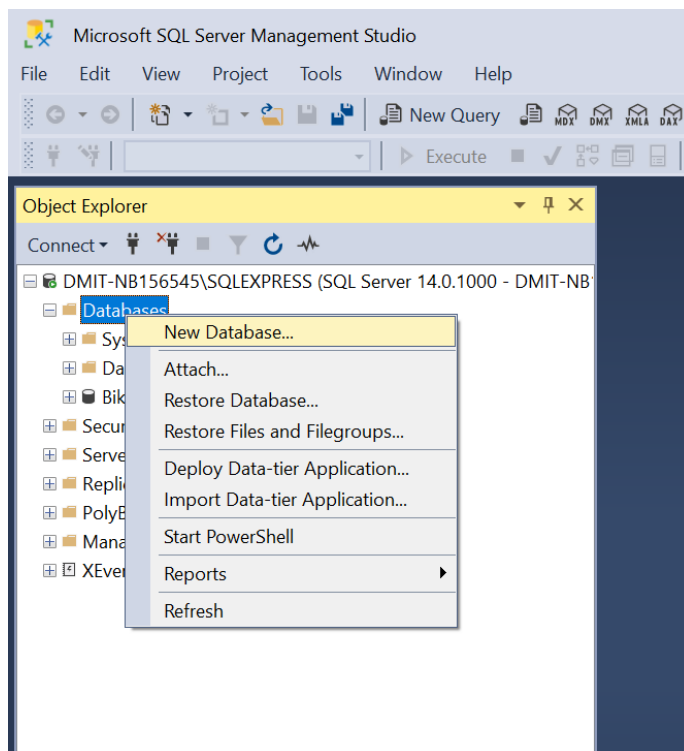
- Create a named database for specific use under a DBMS to store interrelated relations
- Learn the format of creating table with entity integrity
- Understand how to specify general domain constraints for attributes
- Use of Management Studio to help navigate the contents of RDB

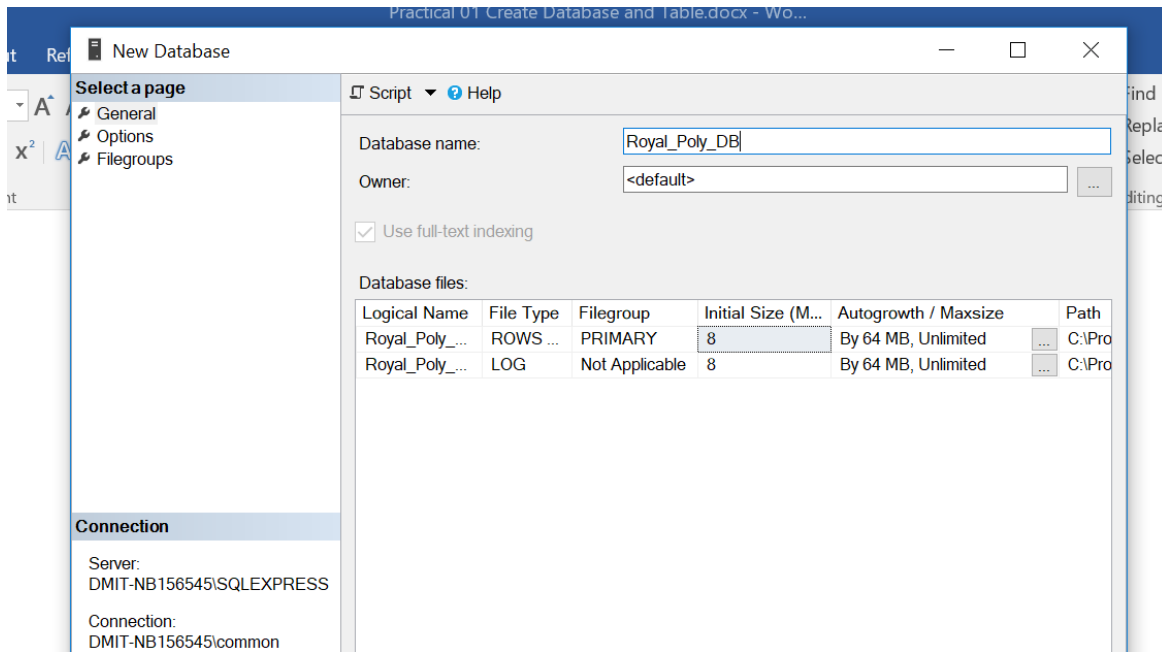
Section A: Create Database

Use the SQL command to create the Royal Poly database:

[Create Database](#) Royal_Poly_DB

(Hint: Launch Microsoft SQL Server Management Express Studio, click New Query. Enter the above command and click Execute. You may want to save your file as Create Database.sql.)





Section B: Create Table with Primary Key

Create all the following relations in the Royal Poly database in MS SQL Server 2005 Express based on the specifications below. It is important that you do so as these are the tables needed for practical 2 onwards.

- (a) Staff_Relation
- (b) Course_Relation
- (c) Department_Relation

Note:

Step 1: What is the Name of the Table?

Rules for Creating Table Name

- Must start with a Letter
- Contain no spaces
- Contain very few special characters
- Table name is NOT case sensitive
- Cannot use SQL reserved words

Step 2: Define the Constraints for each column

- Define Column Name
- Constraint 1: Data type
- Constraint 2: NULL or Not Null. Default is Null when not specified

As an example, a portion of the create table for Staff_Relation is shown below. Complete the code and do the same for Course_Relation and Department_Relation.

Create table Staff_Relation

```
(Staff_No      Char(40      Not Null,
Staff_Name    Varchar(100) Not Null,
```

.....

 Primary key (Staff_No))

	Staff_Relation	Primary Key(Staff_No)	
	Attribute	Data Type	Permissible for Null
1	Staff_No	Char (4)	Not Null
2	Staff_Name	Varchar(100)	Not Null
3	Supervisor	Char(4)	Null
4	Date_Of_Birth	Date	Not Null
5	Grade	VarChar(5)	Not Null
6	Marital_Status	Char(1)	Not Null
7	Pay	Decimal(7,2)	Null
8	Allowance	Decimal(7,2)	Null
9	Hourly_Rate	Decimal(7,2)	Null
10	Gender	Char(1)	Not Null
11	Citizenship	Varchar(10)	Not Null
12	Join_Yr	Integer	Not Null
13	Dept_Cd	VarChar(5)	Not Null
14	Type_of_Employment	Char(2)	Not Null
15	Highest_Qln	Varchar(10)	Not Null
16	Designation	Varchar(20)	Not Null
	Course_Relation	Primary Key(Crse_Cd)	
	Attribute	Data Type	Permissible for Null
1	Crse_Cd	VarChar(5)	Not Null
2	Crse_Name	VarChar(100)	Not Null
3	Offered_By	Varchar(5)	Not Null
4	Crse_Fee	Decimal(7,2)	Not Null
5	Lab_Fee	Decimal(7,2)	Null
	Department_Relation	Primary Key(Dept_Cd)	
	Attribute	Data Type	Permissible for Null
1	Dept_Cd	VarChar(5)	Not Null
2	Dept_Name	VarChar(100)	Not Null
3	HOD	Char(4)	Not Null
4	No_Of_Staff	Integer	Null
5	Max_Staff_Strength	Integer	Null
6	Budget	Decimal(9,2)	Null
7	Expenditure	Decimal(9,2)	Null
8	HOD_Appt_Date	Date	Null

Section C: How to delete a table?

Drop table < table_name >