1. **Write the following Query based on the above datasets.**
   1. **Display all Student and their Department Information based on the relationship.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity

From [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID;

**b. Display all Student and their Address Information based on the relationship.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID, A.City, A.State, A.PostalCode, A.Country

From [enrol].Student AS S INNER JOIN [enrol].Address AS A

ON S.AddressID = A.AddressID;

**c. Display all Department and their Lecturer Information based on the relationship.**

Select

L.LecturerID, L.LecturerName, L.LecturerHighestQualification, L.LecturerAge, L.DepartmentID, D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity

From [enrol].Lecturer AS L INNER JOIN [enrol].Department AS D

ON L.LecturerID = D.DepartmentID;

1. **Display all Student with their Department with Lecturer Information based on the relationship.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity,

L.LecturerID, L.LecturerName, L.LecturerHighestQualification, L.LecturerAge

From [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

INNER JOIN [enrol].Lecturer AS L ON S.DepartmentID = L.DepartmentID;

1. **Display all Student with their Address and Department Information based on the relationship.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

A.StreetAddress, A.City, A.State, A.PostalCode, A.Country,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity

From [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

INNER JOIN [enrol].Address AS A ON S.AddressID = A.AddressID;

1. **Display all Student with Address, Department and Lecturer Information based on the relationship.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

A.StreetAddress, A.City, A.State, A.PostalCode, A.Country,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity,

L.LecturerID, L.LecturerName, L.LecturerHighestQualification, L.LecturerAge

From [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

INNER JOIN [enrol].Address AS A ON S.AddressID = A.AddressID

INNER JOIN [enrol].Lecturer AS L ON S.DepartmentID = L. DepartmentID;

1. **Display all Student with Address, Department and Lecturer Information who belongs to either “ME” or “ECE” department.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

A.StreetAddress, A.City, A.State, A.PostalCode, A.Country,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity,

L.LecturerID, L.LecturerName, L.LecturerHighestQualification, L.LecturerAge

From [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

INNER JOIN [enrol].Address AS A ON S.AddressID = A.AddressID

INNER JOIN [enrol].Lecturer AS L ON S.DepartmentID = L. DepartmentID

WHERE D.DepartmentName IN ('ME', 'ECE')

1. **Display Student with Department and their Lecturer information based on the LecturerHighestQualification either “MS” or “PhD”.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

A.StreetAddress, A.City, A.State, A.PostalCode, A.Country,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity,

L.LecturerID, L.LecturerName, L.LecturerHighestQualification, L.LecturerAge

From [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

INNER JOIN [enrol].Address AS A ON S.AddressID = A.AddressID

INNER JOIN [enrol].Lecturer AS L ON S.DepartmentID = L. DepartmentID

WHERE L.LecturerHighestQualification IN ('MS', 'PhD')

1. **Display all Student with Address, Department and Lecturer Information based on the relationship.**

Select

S.StudentID, S.StudentFirstName, S.StudentLastName, S.StudentDOB, S.StudentMobile, S.StudentRollNo,

S.DepartmentID, S.AddressID,

A.StreetAddress, A.City, A.State, A.PostalCode, A.Country,

D.DepartmentName, D.DepartmentDescription, D.DepartmentCapacity

FROM [enrol].Student AS S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

INNER JOIN [enrol].Address AS A ON S.AddressID = A.AddressID

WHERE A.Country LIKE 'Thailand'

1. **Display Count of Student, Department wise.**

Select

D.DepartmentName,

COUNT(S.StudentID) AS TotalStudents

From

[enrol].Student as S

INNER JOIN [enrol].Department AS D ON S.DepartmentID = D.DepartmentID

GROUP BY D.DepartmentName;

1. **Display Count of Lecturer, Department wise.**

Select

D.DepartmentName,

COUNT(L.LecturerID) AS TotalLecturer

From

[enrol].Lecturer as L

INNER JOIN [enrol].Department AS D ON L.DepartmentID = D.DepartmentID

GROUP BY D.DepartmentName;

1. **Display Count of Student, Country wise.**

Select

A.Country,

COUNT(S.AddressID) AS TotalStudents

From [enrol].Student as S

INNER JOIN [enrol].Address AS A ON A.AddressID = S.AddressID

GROUP BY A.Country;