# Departments:

* + DepartmentID (Primary Key, INT, Identity)
  + DepartmentName (VARCHAR)
  + ManagerID (Foreign Key referencing Instructors)

# Branches:

* + BranchID (Primary Key, INT, Identity)
  + BranchName (VARCHAR)
  + BranchLocation(varchar)
  + BranchPhone(varchar)
  + ManagerID (Foreign Key referencing Instructors)
* **BranchDepartment**
  + **BranchID(Foreign key, referencing Branch)**
  + **DepartmentID(Foreign key, referencing Department)**
  + **Primary(BranchID, DepartmentID)**

# Tracks:

* + TrackID (Primary Key, INT, Identity)
  + TrackName (VARCHAR)
  + DepartmentID (Foreign Key, referencing Departments)

# Instructors:

* + InstructorID (Primary Key, INT, Identity)
  + InstructorFname (VARCHAR)
  + InstructorLname (VARCHAR)
  + InstructorEmail (VARCHAR)
  + Password(VARCHAR)
  + InstructorPhoneNumber (CHAR)
  + Address (VARCHAR)
  + HiringDate (DATE)
  + DepartmentID (Foreign Key referencing Departments)

# Students:

* + StudentID (Primary Key, INT, Identity)
  + StudentFname (VARCHAR)
  + StudentLname (VARCHAR)
  + StudentEmail (VARCHAR)
  + Password (VARCHAR)
  + StudentPhoneNumber (CHAR)
  + DepartmentID (Foreign Key, referencing Departments)
  + BranchID (Foreign Key, referencing Branches)
  + TrackID (Foreign Key, referencing Tracks)

# Courses:

* + CourseID (Primary Key, INT, Identity)
  + CourseName (VARCHAR)
  + Description (VARCHAR)
  + Hours (INT)
* **CourseTracks:** (Many-to-Many relationship between Courses and Tracks)
  + CourseID (Foreign Key referencing Courses)
  + TrackID (Foreign Key referencing Tracks)
  + Primary (CourseID, TrackID)
* **CourseInstructors:** (Many-to-Many relationship between Courses and Instructors)
  + CourseID (Foreign Key referencing Courses)
  + InstructorID (Foreign Key referencing Instructors)
  + Primary (CourseID, InstructorID)
* **CourseStudents:** (Many-to-Many relationship between Courses and Students)
  + CourseID (Foreign Key referencing Courses)
  + StudentID (Foreign Key referencing Students)
  + Degree (TINYINT)
  + Primary (CourseID, StudentID)

# Questions:

* + QuestionID (Primary Key, INT, Identity)
  + CourseID (Foreign Key referencing Courses)
  + QuestionType (foreign key refenceing QuestionType)
  + QuestionBody (TEXT)
* **Question Type:**
  + **TypeId (primary key , int , identity)**
  + **Type (varchar)**
* **Choices:** (for Multiple Choice Questions)
  + **ChoiceID (int)**
  + **QuestoinID (Foreign Key Referencing Questions)**
  + **ChoiceText(TEXT)**
  + IsCorrect(bool)
  + **IsCorrect (bool)**
  + Primary (ChoiceID, QuestionID)

# Exams:

* + ExamID (Primary Key, INT, Identity)
  + InstructorID (Foreign Key referencing Instructors)
  + ExamType (foreign key, referencing ExamType)
  + CourseId (foreign Key, referencing Coures)
  + BranchID (Foreign Key, referencing Branches)
  + TrackID (Foreign Key, referencing Tracks)
  + Date (DATETIME)
  + Duration (INT, in minutes)
* ExamType
  + T\_id (Primary Key, int, Identity)
  + TypeText(varchar)
* **ExamQuestions:** (Many-to-Many relationship between Exams and Questions)
  + ExamID (Foreign Key referencing Exams)
  + QuestionID (Foreign Key referencing Questions)
  + QuestionMark (TINYINT)
* **StudentAnswers:** (Many-to-Many relationship between Students, Exams, Questions and Answers)
  + StudentID (Foreign Key referencing Students)
  + ExamID (Foreign Key referencing StudentExams)
  + QuestionID (Foreign Key referencing Questions)
  + StudentAnswer (Foreign Key referencing Choices)
  + IsCorrect (BIT, Derived)
  + Primary (StudentID, ExamID, QuestionID, StudentAnswer)
* **StudentExams:** (Many-to-Many relationship between Students and Exams)
  + ExamID (Foreign Key referencing Exams)
  + StudentID (Foreign Key referencing Students)
  + ExamDate (DATETIME)
  + Degree (TINYINT, Derived)
  + Primary (ExamID, StudentID)