Abstract:

1. Create a Student table
2. Create the Subjects table
3. Create the Lecturers table
4. Create Fee structure table
5. Create departments table

Come up with the different fields each of these tables may hold and a Schema diagram.

Need to plan on the Primary key and the Foreign keys.

The association between them to be decided!

Next Steps:

1. Insert records into them
2. To try out “where, distinct, truncate, alter, between, in, Like, having” clauses.
3. Difference between unique and distinct
4. To do some Date operations. In one of the above tables to have a date field!
5. Finally to try out the different join types (Inner, Outer, Left, Right etc)

**STUDENT TABLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL NO** | **FIELDS** | **DATA TYPE** | **CONSTRAINT** | **DESCRIPTION** |
| 1 | Student\_id | Int | Primary key | Unique id for each student |
| 2 | First\_name | Varchar(10) |  | First name of the student |
| 3 | Last\_name | Varchar(10) |  | First name of the student |
| 4 | DOB | Date |  | Year of birth |
| 5 | Email | Varchar(10) |  | Email id |
| 6 | Contact\_No | int |  | Contact Number |
| 7 | Department\_Id | int | Foreign Key(DEPARTMENT) | Id of the corresponding department |

**SUBJECT TABLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL NO** | **FIELDS** | **DATA TYPE** | **CONSTRAINT** | **DESCRIPTION** |
| 1 | Subject\_Id | Int | Primary key | Unique id for each subject |
| 2 | Subject\_Name | Varchar(10) |  | Name of each subject |

**LECTURE TABLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL NO** | **FIELDS** | **DATA TYPE** | **CONSTRAINT** | **DESCRIPTION** |
| 1 | Lecturer\_id | Int | Primary key | Unique id for each lecture |
| 2 | First\_name | Varchar (30) |  | First name of the lecture |
| 3 | Last\_name | Varchar (30) |  | Last name of the lecture |
| 4 | Address | Varchar (30) |  | Address |
| 5 | Email | Varchar(30) |  | Email id |
| 6 | Contact\_no | Int |  | Contact Number |
| 7 | Subject\_Id | int | Foreign Key(SUBJECT) | Id of the corresponding Subject |

**FEE TABLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL NO** | **FIELDS** | **DATA TYPE** | **CONSTRAINT** | **DESCRIPTION** |
| 1 | Fee\_Id | Int | Primary key | Unique id for fees |
| 2 | Fee\_Type | Varchar(30) |  | Type of Fees |
| 3 | Amount | Int |  | Actual Amount |
| 4 | Department\_Id | Int | Foreign Key | Id of the corresponding department |

**DEPARTMENT TABLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL NO** | **FIELDS** | **DATA TYPE** | **CONSTRAINT** | **DESCRIPTION** |
| 1 | Department\_Id | Int | Primary Key | Unique id for each department |
| 2 | Department\_Name | Varchar(30) |  | Name of the department |
| 3 | Lecturer\_id | Int | Foreign key (LECTURE) | Head of the corresponding department |

**ER DIAGRAM**

STUDENTS

Teaches

SUBJECTS

Includes

LECTURER

DEPARTMENT

Teaches

FEES

Has