**ASSIGNMENT 1**

Create the following tables using mentioned constraints.

1. Department

|  |  |  |
| --- | --- | --- |
| Col Name | dept\_id | dept\_name |
| Data Type | INTEGER | VARCHAR(50) |
| Constraint | Primary Key | Not Null |
| Record 1 | 10 | Computer Science |
| Record 2 | 20 | Mathematics |

1. Student

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Col Name | student\_id | fname | lname | email | dob | gender | phone | address | Department\_id |
| Data Type | INTEGER | VARCHAR  (50) | VARCHAR  (50) | VARCHAR  (50) | DATE | VARCHAR  (10) | VARCHAR  (10) | VARCHAR  (100) | INTEGER |
| Constraint | P.K. | Not Null | Not Null | Unique | Check  (dob <= CURRENT\_DATE) | CHECK (gender IN ('Male', 'Female', 'Other')) | DEFAULT 'NA' | DEFAULT 'NA' | Not Null |
| Record 1 | 101 | John | Doe | john.doe@example.com | 1995-05-15 | Male | 123456789 | 123 Street, City | 10 |
| Record 2 | 102 | Jane | Smith | jane.smith@example.com | 1998-12-03 | Female | 987654321 | 456 Avenue, Town | 20 |

CONSTRAINT fk\_department\_id FOREIGN KEY (department\_id) REFERENCES Department(dept\_id)

CREATE TABLE Department (

dept\_id INTEGER PRIMARY KEY,

dept\_name VARCHAR(50) NOT NULL

);

CREATE TABLE Student (

student\_id INTEGER PRIMARY KEY,

fname VARCHAR(50) NOT NULL,

lname VARCHAR(50) NOT NULL,

email VARCHAR(50) UNIQUE NOT NULL,

dob DATE CHECK (dob <= CURRENT\_DATE),

gender VARCHAR(10) CHECK (gender IN ('Male', 'Female', 'Other')),

phone VARCHAR(10) DEFAULT 'NA',

address VARCHAR(100) DEFAULT 'NA',

department\_id INT NOT NULL,

CONSTRAINT fk\_department\_id FOREIGN KEY (department\_id) REFERENCES Department(dept\_id)

);

INSERT INTO Department VALUES (10,'Computer Science');

INSERT INTO Department VALUES (20, 'Mathematics');

INSERT INTO Student VALUES (101, 'John', 'Doe', 'john.doe@example.com', '1995-05-15', 'Male', '123456789', '123 Street, City', 10);

INSERT INTO Student VALUES (102, 'Jane', 'Smith', 'jane.smith@example.com', '1998-12-03', 'Female', '987654321', '456 Avenue, Town', 20);

select \* from department;

select \* from student;