### **Create Table:**

CREATE TABLE students (

student\_id varchar2(10),

first\_name varchar2(25) NOT NULL,

last\_name varchar2(25) NOT NULL,

email varchar2 (255) NOT NULL,

address varchar2 (255) NOT NULL,

city varchar2 (50) NOT NULL,

state char(2) NOT NULL,

zip number (5,0) NOT NULL,

year\_of\_entering number NOT NULL,

CONSTRAINT student\_id\_pk PRIMARY KEY (student\_id) ,

CONSTRAINT state\_us\_ck CHECK (state IN( 'AL', 'AK', 'AZ', 'AR', 'CA', 'CO', 'CT', 'DE', 'FL', 'GA', 'HI', 'ID', 'IL', 'IN', 'IA', 'KS', 'KY', 'LA', 'ME', 'MD', 'MA', 'MI', 'MN', 'MS', 'MO', 'MT', 'NE', 'NV', 'NH', 'NJ', 'NM', 'NY', 'NC', 'ND', 'OH', 'OK', 'OR', 'PA', 'RI', 'SC', 'SD', 'TN', 'TX', 'UT', 'VT', 'VA', 'WA', 'WV', 'WI', 'WY' ))

);

CREATE TABLE professor (

prof\_id varchar2(10),

first\_name varchar2 (25) NOT NULL,

last\_name varchar2 (25) NOT NULL,

email varchar2 (255) NOT NULL,

address varchar2 (255) NOT NULL,

city varchar2 (50) NOT NULL,

state char(2) NOT NULL,

zip number(5,0) NOT NULL,

CONSTRAINT prof\_id\_pk PRIMARY KEY (prof\_id) ,

CONSTRAINT prof\_state\_us\_ck CHECK (state IN( 'AL', 'AK', 'AZ', 'AR', 'CA', 'CO', 'CT', 'DE', 'FL', 'GA', 'HI', 'ID', 'IL', 'IN', 'IA', 'KS', 'KY', 'LA', 'ME', 'MD', 'MA', 'MI', 'MN', 'MS', 'MO', 'MT', 'NE', 'NV', 'NH', 'NJ', 'NM', 'NY', 'NC', 'ND', 'OH', 'OK', 'OR', 'PA', 'RI', 'SC', 'SD', 'TN', 'TX', 'UT', 'VT', 'VA', 'WA', 'WV', 'WI', 'WY' ))

);

CREATE Table books (

books\_isbn varchar2(15),

books\_name varchar2 (255),

publisher varchar2 (100),

CONSTRAINT books\_isbn\_pk PRIMARY KEY (books\_isbn)

);

CREATE Table courses (

course\_type varchar2(10),

course\_name varchar2 (255),

course\_explanation varchar2 (512),

books\_isbn varchar2(15),

CONSTRAINT course\_type\_pk PRIMARY KEY (course\_type) ,

CONSTRAINT books\_id\_fk FOREIGN KEY (books\_isbn) REFERENCES books (books\_isbn)

);

CREATE TABLE classes (

course\_code varchar2 (15),

course\_type varchar2 (10),

prof\_id varchar2(10),

term varchar2 (10),

building varchar2(15),

class\_number number,

start\_time varchar2 (5),

end\_time varchar2 (5),

CONSTRAINT course\_code\_pk PRIMARY KEY (course\_code) ,

CONSTRAINT course\_type\_fk FOREIGN KEY (course\_type) REFERENCES courses (course\_type),

CONSTRAINT prof\_id\_fk FOREIGN KEY (prof\_id) REFERENCES professor (prof\_id)

);

CREATE TABLE assignment (

assignment\_id number,

course\_code varchar2 (15),

student\_id varchar2(10) ,

assignment\_name varchar2 (255) ,

Assignment\_week varchar2(8),

date\_start date,

due\_date date,

date\_submitted date,

submitted varchar2(3),

Assignment\_file blob,

CONSTRAINT assignment\_id\_pk PRIMARY KEY (assignment\_id) ,

CONSTRAINT student\_id\_fk FOREIGN KEY (student\_id) REFERENCES students (student\_id),

CONSTRAINT course\_code\_fk FOREIGN KEY (course\_code) REFERENCES classes (course\_code),

CONSTRAINT submitted\_ck CHECK (submitted IN( 'YES' , 'NO' ))

);

CREATE TABLE notes\_taking (

notes\_id number,

course\_code varchar2(15),

student\_id varchar2(10),

notes\_week varchar2(8)

notes\_title varchar2(255),

notes varchar2(2000),

date\_of\_notes date,

Notes\_file blob,

CONSTRAINT notes\_id\_pk PRIMARY KEY (notes\_id) ,

CONSTRAINT notes\_course\_code\_fk FOREIGN KEY (course\_code) REFERENCES classes (course\_code),

CONSTRAINT notes\_student\_id\_fk FOREIGN KEY (student\_id) REFERENCES students (student\_id)

);

### **Create Sequence:**

CREATE SEQUENCE notes\_id\_seq

START WITH 1

INCREMENT BY 1

MAXVALUE 100000

NOCACHE

NOCYCLE;

CREATE SEQUENCE assignment\_id\_seq

START WITH 1

INCREMENT BY 1

MAXVALUE 100000

NOCACHE

NOCYCLE;

**Insert Values:**

INSERT INTO students

VALUES (‘g2290749’, 'Giovanni', 'Govert', 'giovanni.govert@g.austincc.edu' ,'1300 Split Rail PKWY', 'Austin' ,'TX',78750,2023),

(‘o2290749’, 'Olivia', 'Benson', 'olivia.benson@g.austincc.edu' ,'2233 Cassia Drive', 'Austin' ,'TX',78760,2022);

INSERT INTO professor

VALUES ('TAY-2290', 'Taylor' ,'Swift', 'taylor.swift@austincc.edu', '2004 Westover Wood' ,'Austin','TX', 78790),

('SNA-2291', 'Severus' ,'Snape', 'severus.snape@austincc.edu', '1133 Privett Drive' ,'Austin','TX', 78770);

INSERT INTO books

VALUES (9780134444321,'Programming Fundamentals with Python - Edition 2023', 'Pearson'), (9780134434321,'Magic Fundementals - Edition 2020', 'Ministry of Magic');

INSERT INTO courses

VALUES (‘COSC-1336’, ‘Fundamental of Python’,’Python is a programming language that is widely used’ ,9780134444321), (‘MODA-1379’, ‘Magic of Dark Art’,’Dark art is a magic used by witches’ ,9780134434321);

INSERT INTO classes

VALUES (‘COSC-1336-001’,’COSC-1336’,’TAY-2290’,’Fall 2023’,’Building 2000’, 2012 ,’08:00’,’09:00’), (‘MODA-1379-002’,’’MODA-1379’,’SNA-2291’,’Fall 2023’,’Building 3000’, 3014 ,’09:00’,’11:00’);

INSERT INTO assignment

VALUES (

Assignment\_id\_seq.nextval, 'COSC-1336-001',

‘G2290749’, 'W1: Python Function',

TO\_DATE('2023-10-17', 'YYYY-MM-DD'),

TO\_DATE('2023-10-17', 'YYYY-MM-DD'),

TO\_DATE('2023-10-14', 'YYYY-MM-DD'),

'YES'

);

INSERT INTO notes\_taking

VALUES (notes\_id\_seq.nextval, 'COSC-1336-001', 'g2290749', 'Python Function', 'Print function is great', TO\_DATE('2023-10-17', 'YYYY-MM-DD'));