Project Details

-- Step 1: Create Table for Universities

```
CREATE TABLE universities (
    id SERIAL PRIMARY KEY,          -- Unique ID for each university
    university_name TEXT NOT NULL,  -- Full name of the university
    university_shortname TEXT NOT NULL UNIQUE, -- Abbreviation/short name
    university_city TEXT NOT NULL   -- City where the university is located
);
```

-- Step 2: Create Table for Professors

```
CREATE TABLE professors (
    id SERIAL PRIMARY KEY,          -- Unique ID for each professor
    firstname TEXT NOT NULL,        -- First name of the professor
    lastname TEXT NOT NULL,         -- Last name of the professor
    university_id INT NOT NULL,     -- Foreign key referencing universities
    FOREIGN KEY (university_id)
        REFERENCES universities (id)
        ON DELETE CASCADE           -- Delete professor if university is deleted
);
```

-- Step 3: Create Table for Organizations

```
CREATE TABLE organizations (
    id SERIAL PRIMARY KEY,          -- Unique ID for each organization
    organization_sector TEXT NOT NULL -- Sector to which the organization belongs
);
```

-- Step 4: Populate data from CSV file to respective Tables

```
INSERT INTO universities (university_name, university_shortname, university_city)
SELECT DISTINCT university, university_shortname, university_city
FROM university_professors;
```

```
INSERT INTO professors (firstname, lastname, university_id)
SELECT DISTINCT
    up.firstname,
    up.lastname,
    u.id AS university_id
FROM university_professors up
```

```
JOIN universities u ON up.university_shortname =
u.university_shortname;

INSERT INTO organizations (organization_sector)
SELECT DISTINCT organization_sector
FROM university_professors;
```

-- Update organizations table to ensure unique organization names

```
ALTER TABLE organizations ADD COLUMN name TEXT UNIQUE;

UPDATE organizations
SET name = up.organization
FROM university_professors up
WHERE organizations.organization_sector = up.organization_sector;

INSERT INTO is_affiliated_with (professor_id, organization_id,
function)
   p.id AS professor_id,
SELECT DISTINCT
   o.id AS organization_id,
   up.function
FROM university_professors up
JOIN professors p
```

```
    ON up.firstname = p.firstname AND up.lastname = p.lastname
JOIN organizations o
    ON up.organization = o.name;
```

Step5 : Check all the tables

```
-- View All Universities
SELECT * FROM universities;

-- View All Professors
SELECT * FROM professors;

-- View All Organizations
SELECT * FROM organizations;

-- View All Affiliations
SELECT * FROM is_affiliated_with;
```