CREATE DATABASE task\_3;

--DROP DATABASE task\_3;

USE task\_3;

CREATE TABLE Country(

id INT IDENTITY(1,1) PRIMARY KEY,

country\_name VARCHAR(50) UNIQUE NOT NULL

);

CREATE TABLE University(

id INT IDENTITY(1,1) PRIMARY KEY,

country\_id INT NOT NULL,

university\_name VARCHAR(50) NOT NULL, -- Heidelberg university

FOREIGN KEY (country\_id) REFERENCES Country(id)

);

CREATE TABLE Ranking\_System(

id INT PRIMARY KEY IDENTITY(1,1),

system\_name VARCHAR(150) NOT NULL

);

CREATE TABLE Ranking\_Criteria(

id INT PRIMARY KEY IDENTITY(1,1),

ranking\_system\_id INT NOT NULL,

criteria\_name VARCHAR(50) NOT NULL,

FOREIGN KEY (ranking\_system\_id) REFERENCES Ranking\_System(id)

);

CREATE TABLE University\_Ranking\_Year(

university\_id INT ,

ranking\_criteria\_id INT,

university\_year INT NOT NULL,

score INT NOT NULL,

FOREIGN KEY (university\_id) REFERENCES University (id),

FOREIGN KEY (ranking\_criteria\_id) REFERENCES RAnking\_Criteria (id),

CONSTRAINT pk\_university\_year PRIMARY KEY(university\_id,ranking\_criteria\_id)

);

INSERT INTO Country(country\_name)

VALUES('Spain'),('Poland'),('France'),('Germany'),('England');

INSERT INTO University(country\_id,university\_name)

VALUES(1,'Universitat de Barcelona'),

(2,'Wroclaw university of Science and technology'),

(3,'Ecole Polytechnique'),

(4,'Technical University of Munich'),

(5,'Oxford');

INSERT INTO Ranking\_System(system\_name)

VALUES ('QS World University Rankings'),

('Times Higher Education World University Rankings'),

('Academic Ranking of World Universities'),

('U.S. News & World Report Best Global Universities Rankings'),

('CWTS Leiden Ranking');

INSERT INTO Ranking\_Criteria(ranking\_system\_id,criteria\_name)

VALUES (3,'Internationalization'),

(1,'Reputation'),

(5,'Teaching quality'),

(4,'Social impact'),

(2,'Research output');

INSERT INTO University\_Ranking\_Year

VALUES (2,3,2019,90),

(4,5,2020,85),

(5,1,2021,76),

(1,4,2022,56),

(3,2,2023,31);

-- QUERIES

SELECT \* FROM University\_Ranking\_Year

WHERE score > 80;

SELECT University.university\_name,Country.country\_name

FROM University

INNER JOIN Country ON University.country\_id = Country.id;

SELECT University.university\_name,Country.country\_name,University\_Ranking\_Year.university\_year,University\_Ranking\_Year.score,Ranking\_Criteria.criteria\_name

FROM University

INNER JOIN Country ON University.country\_id = Country.id

INNER JOIN University\_Ranking\_Year ON University.id = University\_Ranking\_Year.university\_id

INNER JOIN Ranking\_Criteria ON University\_Ranking\_Year.ranking\_criteria\_id = Ranking\_Criteria.id;