-- حذف جداول در صورت وجود

DROP TABLE IF EXISTS children\_impact CASCADE;

DROP TABLE IF EXISTS children\_interaction CASCADE;

DROP TABLE IF EXISTS impact CASCADE;

DROP TABLE IF EXISTS interaction CASCADE;

DROP TABLE IF EXISTS fridgedoor CASCADE;

DROP TABLE IF EXISTS children CASCADE;

DROP TABLE IF EXISTS velociraptor CASCADE;

-- ایجاد جداول با محدودیت‌ها

CREATE TABLE velociraptor (

velociraptor\_id SERIAL PRIMARY KEY,

power INT NOT NULL CHECK (power > 0 AND power <= 100), -- قدرت باید بین 1 تا 100 باشد

behavior VARCHAR (256) NOT NULL CHECK (behavior IN ('aggressive', 'calm', 'neutral')) -- فقط سه مقدار مجاز هستند

);

CREATE TABLE children (

child\_id SERIAL PRIMARY KEY,

Name TEXT NOT NULL CHECK (char\_length(Name) > 1), -- نام باید حداقل ۲ حرف باشد

Reaction TEXT NOT NULL

);

CREATE TABLE fridgedoor (

door\_id SERIAL PRIMARY KEY,

Resistance INT NOT NULL CHECK (Resistance >= 0), -- مقاومت نمی‌تواند منفی باشد

Status TEXT NOT NULL CHECK (Status IN ('open', 'closed')) -- وضعیت فقط می‌تواند 'open' یا 'closed' باشد

);

CREATE TABLE interaction (

interaction\_id SERIAL PRIMARY KEY,

velociraptorId INT REFERENCES velociraptor(velociraptor\_id) ON DELETE CASCADE, -- اگر دایناسور حذف شد، تعاملاتش هم حذف شوند

doorId INT REFERENCES fridgedoor(door\_id) ON DELETE CASCADE, -- اگر در حذف شد، تعاملاتش هم حذف شوند

Result TEXT NOT NULL CHECK (char\_length(Result) > 2) -- نتیجه باید حداقل ۳ حرف باشد

);

-- M:M

CREATE TABLE children\_interaction (

childId INT REFERENCES children(child\_id) ON DELETE CASCADE,

interactionId INT REFERENCES interaction(interaction\_id) ON DELETE CASCADE,

PRIMARY KEY (childId, interactionId)

);

CREATE TABLE impact (

impact\_id SERIAL PRIMARY KEY,

velociraptorId INT REFERENCES velociraptor(velociraptor\_id) ON DELETE CASCADE,

doorid INT REFERENCES fridgedoor(door\_id) ON DELETE CASCADE,

impacttype TEXT NOT NULL CHECK (impacttype IN ('physical', 'psychological')), -- فقط دو نوع مجاز هستند

description TEXT NOT NULL CHECK (char\_length(description) > 5) -- توضیح باید حداقل ۵ حرف باشد

);

CREATE TABLE children\_impact (

childId INT REFERENCES children(child\_id) ON DELETE CASCADE,

impactId INT REFERENCES impact(impact\_id) ON DELETE CASCADE,

PRIMARY KEY (childId, impactId)

);

-- Insert data into Velociraptor table

INSERT INTO velociraptor (power, behavior) VALUES

(10, 'aggressive'),

(8, 'calm');

-- Insert data into Children table

INSERT INTO children (name, reaction) VALUES

('tim', 'scared'),

('alice', 'curious');

-- Insert data into FridgeDoor table

INSERT INTO fridgedoor (resistance, status) VALUES

(15, 'closed'),

(10, 'open');

-- Insert data into Interaction table

INSERT INTO Interaction (velociraptorid, doorid, result) VALUES

(1, 1, 'door held','2025-03-30 14:00:00+03'),

(2, 2, 'door opened','2025-03-31 14:00:00+03');

-- Insert data into Children\_Interaction table

INSERT INTO children\_interaction (childid, interactionid) VALUES

(1, 1), -- Tim participated in Interaction 1

(2, 1), -- Alice participated in Interaction 1

(1, 2); -- Tim participated in Interaction 2

-- Insert data into Impact table

INSERT INTO Impact (velociraptorid, doorid, Impacttype, description) VALUES

(1, 1, 'physical', 'door resisted'),

(2, 2, 'psychological', 'children scared');

-- Insert data into Children\_Impact table

INSERT INTO children\_impact (childid, impactid) VALUES

(1, 1), -- Tim was affected by Impact 1

(2, 2); -- Alice was affected by Impact 2

--(تاریخ دستی اگر میخاهیم وارد کنیم :)

SELECT TABLE Interaction

ADD COLUMN interaction\_time TIMESTAMP WITH TIME ZONE;

SELECT \* FROM interaction

--(تاریخ خودکار وارد میشه:)

ALTER TABLE impact DROP COLUMN IF EXISTS impact\_date; -- داریم میگیم اگر وجود داره این ستون,اول حذفش کن

ALTER TABLE impact ADD COLUMN impact\_date TIMESTAMP WITH TIME ZONE DEFAULT CURRENT\_TIMESTAMP;

SELECT \* FROM impact