

# TÖL303G Gagnasafnsfræði

## Verkefni 9

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### 1. Yfirlit yfir vensl:

Stars(name, address) // PK: name  
Movies(title, year, length, genre) // PK: title, year  
Studios(name, address) // PK: name  
Stars-in(name, title, year) // PK: name, title, year; FK: name, title, year  
Owns(title, year, studioName) // PK: title, year, name; FK: title, year, name

### Create skipanir:

```
CREATE TABLE Stars(  
    name TEXT PRIMARY KEY NOT NULL,  
    address TEXT  
);  
CREATE TABLE Movies(  
    title TEXT NOT NULL,  
    year INTEGER NOT NULL,  
    length TEXT,  
    genre TEXT,  
    PRIMARY KEY (title, year)  
);  
CREATE TABLE Studios(  
    name TEXT PRIMARY KEY NOT NULL,  
    address TEXT  
);  
CREATE TABLE StarsIn(  
    starName TEXT NOT NULL,  
    movieTitle TEXT NOT NULL,  
    movieYear INTEGER NOT NULL,  
    PRIMARY KEY (starName, movieTitle),  
    FOREIGN KEY (starName) REFERENCES Stars(name),  
    FOREIGN KEY (movieTitle) REFERENCES Movies(title),  
    FOREIGN KEY (movieYear) REFERENCES Movies(year)  
);  
CREATE TABLE Owns(  
    movieTitle TEXT NOT NULL,  
    movieYear INTEGER NOT NULL,  
    studioName TEXT NOT NULL,  
    PRIMARY KEY (movieTitle, movieYear, studioName),  
    FOREIGN KEY (movieTitle) REFERENCES Movies(title),
```

FOREIGN KEY (movieYear) REFERENCES Movies(year),  
FOREIGN KEY (studioName) REFERENCES Studios(name)  
);

2. Yfirlit yfir vensl:

Studios(name, addr) // PK: name  
Crews(number, crewChief, studioName) // PK: number, studioName; FK:  
studioName.

Create skipanir:

```
CREATE TABLE Studios(  
    name TEXT PRIMARY KEY NOT NULL,  
    addr TEXT  
);  
CREATE TABLE Crews(  
    number INTEGER NOT NULL,  
    crewChief TEXT,  
    studioName NOT NULL,  
    PRIMARY KEY (number, studioName),  
    FOREIGN KEY (studioName) REFERENCES Studios(name)  
);
```

3. Yfirlit yfir vensl:

Customers(SSNo, name, addr, phone) // PK: SSNo  
Flights(number, day, aircraft) // PK: number, day  
Bookings(row, seat, customerSSNo, flightNumber, flightDay) // PK:  
CustomerSSNo, flightNumber, flightDay; FK: customerSSNo, flightNumber,  
flightDay

Create skipanir:

```
CREATE TABLE Customers(  
    SSNo INTEGER PRIMARY KEY NOT NULL,  
    name TEXT,  
    addr TEXT,  
    phone INTEGER  
);  
CREATE TABLE Flights(  
    number TEXT NOT NULL,  
    day DATE NOT NULL,  
    aircraft TEXT,  
    PRIMARY KEY (number, day)  
);
```

```
CREATE TABLE Bookings(  
    customerSSNo INTEGER NOT NULL,  
    flightNumber TEXT NOT NULL,  
    flightDay DATE NOT NULL,  
    row INTEGER,  
    seat TEXT,  
    PRIMARY KEY (customerSSNo, flightNumber, flightDay),  
    FOREIGN KEY (customerSSNo) REFERENCES Customers(SSNo),  
    FOREIGN KEY (flightNumber) REFERENCES Flights(number),  
    FOREIGN KEY (flightDay) REFERENCES Flights(day)  
);
```