

یک برنامه در زبان SQL که شامل کلمات کلیدی آن است:

```
-- Create a database called Books
CREATE DATABASE Books;

-- Use the Books database
USE Books;

-- Create a table called Authors with four columns: id, name, country, and birth_year
CREATE TABLE Authors ( id INT PRIMARY KEY, name VARCHAR(50) NOT NULL, country
VARCHAR(50), birth_year INT );

-- Insert some data into the Authors table
INSERT INTO Authors (id, name, country, birth_year)
VALUES (1, 'George Orwell', 'UK', 1903), (2, 'Maya Angelou', 'USA', 1928), (3, 'Yuval
Noah Harari', 'Israel', 1976),
(4, 'J.K. Rowling', 'UK', 1965), (5, 'Rupi Kaur', 'Canada', 1992);

-- Create a table called Books with five columns: id, title, author_id, price, and
rating
CREATE TABLE Books ( id INT PRIMARY KEY, title VARCHAR(100) NOT NULL, author_id INT
NOT NULL, price DECIMAL(5,2), rating INT CHECK (rating BETWEEN 1 AND 5),
FOREIGN KEY (author_id) REFERENCES Authors (id) );

-- Insert some data into the Books table
INSERT INTO Books (id, title, author_id, price, rating)
VALUES (1, '1984', 1, 9.99, 5),
(2, 'Animal Farm', 1, 7.99, 4), (3, 'I Know Why the Caged Bird Sings', 2, 8.99, 5),
(4, 'Sapiens: A Brief History of Humankind', 3, 12.99, 5), (5, 'Harry Potter and the
Philosopher's Stone', 4, 6.99, 5),
(6, 'Milk and Honey', 5, 9.99, 4);

-- Alter the Authors table to add a column called genre
ALTER TABLE Authors ADD genre VARCHAR(50) CHECK (genre IN ('Fiction', 'Non-fiction',
'Poetry'));

-- Select the name and country of the authors who write fiction
SELECT name, country FROM Authors as au WHERE au.genre = 'fiction';

-- Select the title and price of the books that have a rating of 5
SELECT title, price FROM Books WHERE rating = 5;

-- Select the name and title of the authors and their books using a join
SELECT Authors.name, Books.title FROM Authors INNER JOIN Books ON Authors.id =
Books.author_id;

-- Update the price of the book '1984' to 10.99
UPDATE Books SET price = 10.99 WHERE title = '1984';

-- Delete the book 'Milk and Honey' from the Books table
DELETE FROM Books WHERE title = 'Milk and Honey';

-- Alter the Authors table to drop the column birth_year
ALTER TABLE Authors DROP COLUMN birth_year;

-- Drop the Books table
DROP TABLE Books;

-- Drop the Books database
DROP DATABASE Books;

-- Added code starts here
```

```

-- Create a database called Movies
CREATE DATABASE Movies;

-- Use the Movies database
USE Movies;

-- Create a table called Actors with three columns: id, name, and gender
CREATE TABLE Actors ( id INT PRIMARY KEY, name VARCHAR(50) NOT NULL, gender
VARCHAR(10) CHECK (gender IN ('Male', 'Female', 'Other')) );

-- Insert some data into the Actors table
INSERT INTO Actors (id, name, gender) VALUES (1, 'Tom Hanks', 'Male'), (2, 'Meryl
Streep', 'Female'),
(3, 'Will Smith', 'Male'), (4, 'Emma Watson', 'Female'), (5, 'Elliot Page', 'Other');

-- Create a table called Movies with four columns: id, title, year, and genre
CREATE TABLE Movies ( id INT PRIMARY KEY, title VARCHAR(100) NOT NULL, year INT,
genre VARCHAR(50) );

-- Insert some data into the Movies table
INSERT INTO Movies (id, title, year, genre)
VALUES (1, 'Forrest Gump', 1994, 'Drama'), (2, 'The Devil Wears Prada', 2006,
'Comedy'),
(3, 'Men in Black', 1997, 'Sci-Fi'), (4, 'Beauty and the Beast', 2017, 'Fantasy'),
(5, 'Inception', 2010, 'Thriller');

-- Create a table called Casts with three columns: movie_id, actor_id, and role
CREATE TABLE Casts ( movie_id INT, actor_id INT, role VARCHAR(50), PRIMARY KEY
(movie_id, actor_id),
FOREIGN KEY (movie_id) REFERENCES Movies (id), FOREIGN KEY (actor_id) REFERENCES
Actors (id) );

-- Insert some data into the Casts table
INSERT INTO Casts (movie_id, actor_id, role) VALUES (1, 1, 'Forrest Gump'), (2, 2,
'Miranda Priestly'),
(3, 3, 'Agent J'), (4, 4, 'Belle'), (5, 5, 'Ariadne');

-- Select the title and genre of the movies that were released after 2000
SELECT title, genre FROM Movies WHERE year > 2000;

-- Select the name and gender of the actors who played in 'Men in Black'
SELECT Actors.name, Actors.gender

FROM Actors INNER JOIN Casts ON Actors.id = Casts.actor_id WHERE Casts.movie_id =
(SELECT id FROM Movies WHERE title = 'Men in Black');

-- Select the title and role of the movies that Tom Hanks played in
SELECT Movies.title, Casts.role FROM Movies
INNER JOIN Casts ON Movies.id = Casts.movie_id WHERE Casts.actor_id = (SELECT id FROM
Actors WHERE name = 'Tom Hanks');

-- Select the distinct genres of the movies in the Movies table
SELECT DISTINCT genre FROM Movies;

-- Select the name and count of the movies that each actor played in, grouped by
actor name
SELECT Actors.name, COUNT(Casts.movie_id) AS movie_count FROM Actors
LEFT JOIN Casts ON Actors.id = Casts.actor_id GROUP BY Actors.name;

-- Select the name and average rating of the movies that each actor played in,
grouped by actor name and ordered by rating in descending order
SELECT Actors.name, AVG(Movies.rating) AS avg_rating FROM Actors

```

```
LEFT JOIN Casts ON Actors.id = Casts.actor_id LEFT JOIN Movies ON Casts.movie_id =  
Movies.id GROUP BY Actors.name ORDER BY avg_rating DESC;  
  
-- Select the name and gender of the actors who played in more than one movie, having  
a movie count greater than 1  
SELECT Actors.name, Actors.gender FROM Actors LEFT JOIN Casts ON Actors.id =  
Casts.actor_id  
GROUP BY Actors.name HAVING COUNT(Casts.movie_id) > 1;  
  
-- Added code ends here
```

منبع:

- <https://join.skype.com/bot/cf0e6215-34fe-409b-9e4b-135d7f3aa13b>