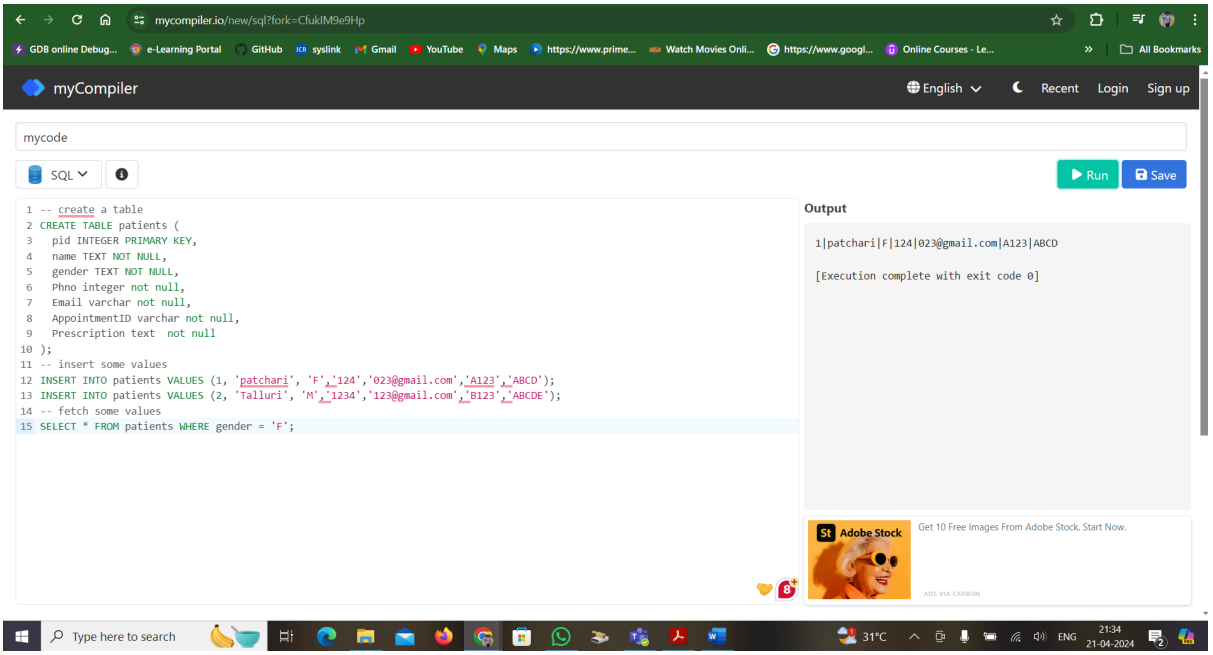
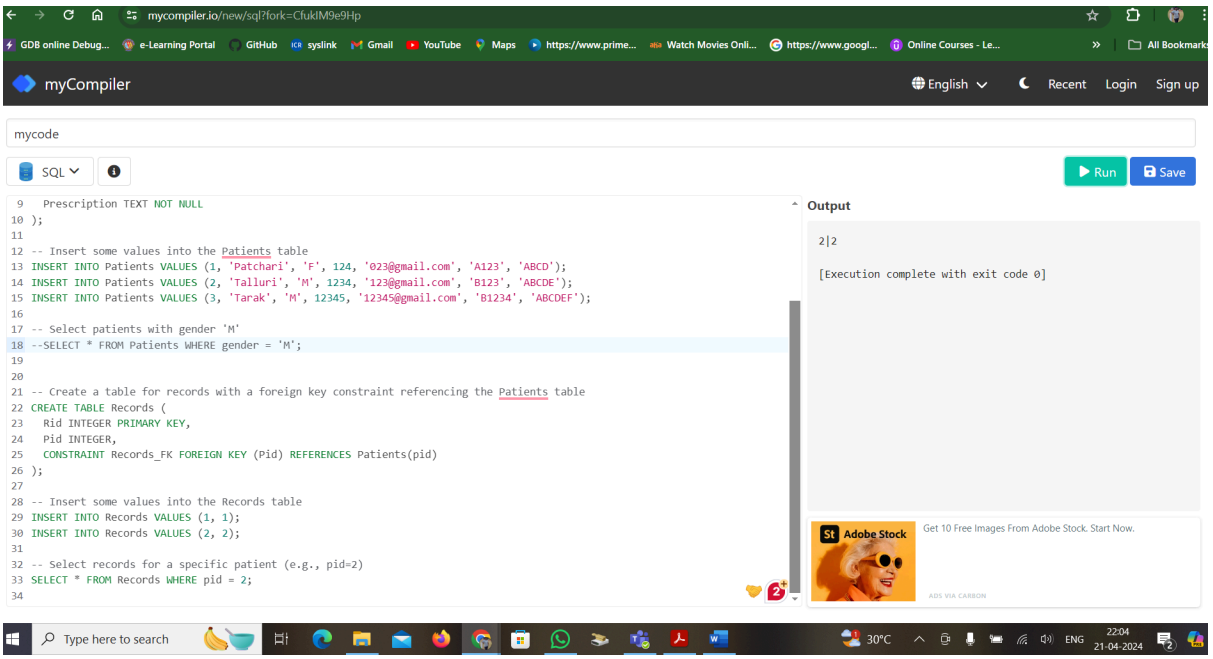
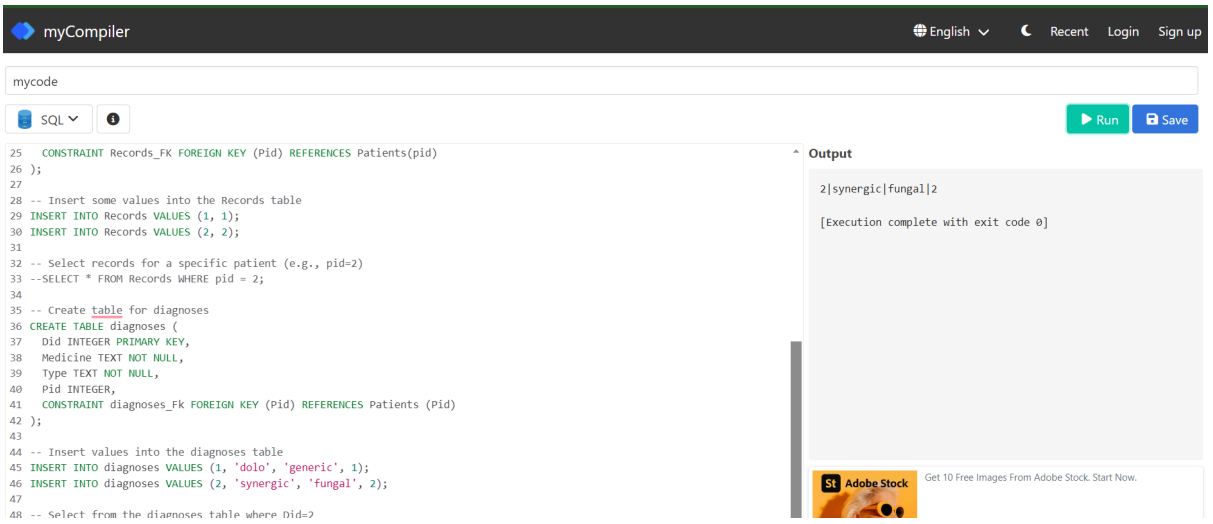



```
-- Create a table for patients
CREATE TABLE Patients (
  pid INTEGER PRIMARY KEY,
  name TEXT NOT NULL,
  gender TEXT NOT NULL,
  Phno INTEGER NOT NULL,
  Email VARCHAR NOT NULL,
  AppointmentID VARCHAR NOT NULL,
  Prescription TEXT NOT NULL
);

-- Insert some values into the Patients table
INSERT INTO Patients VALUES (1, 'Patchari', 'F', 124, '023@gmail.com', 'A123', 'ABCD');
INSERT INTO Patients VALUES (2, 'Talluri', 'M', 1234, '123@gmail.com', 'B123', 'ABCDE');
INSERT INTO Patients VALUES (3, 'Tarak', 'M', 12345, '12345@gmail.com', 'B1234',
'ABCDEF');

-- Select patients with gender 'M'
--SELECT * FROM Patients WHERE gender = 'M';


-- Create a table for records with a foreign key constraint referencing the Patients table
CREATE TABLE Records (
  Rid INTEGER PRIMARY KEY,
  Pid INTEGER,
  CONSTRAINT Records_FK FOREIGN KEY (Pid) REFERENCES Patients(pid)
);

-- Insert some values into the Records table
INSERT INTO Records VALUES (1, 1);
```

```
INSERT INTO Records VALUES (2, 2);

-- Select records for a specific patient (e.g., pid=2)
--SELECT * FROM Records WHERE pid = 2;

-- Create table for diagnoses
CREATE TABLE diagnoses (
  Did INTEGER PRIMARY KEY,
  Medicine TEXT NOT NULL,
  Type TEXT NOT NULL,
  Pid INTEGER,
  CONSTRAINT diagnoses_Fk FOREIGN KEY (Pid) REFERENCES Patients (Pid)
);

-- Insert values into the diagnoses table
INSERT INTO diagnoses VALUES (1, 'dolo', 'generic', 1);
INSERT INTO diagnoses VALUES (2, 'synergic', 'fungal', 2);
INSERT INTO diagnoses VALUES (3, 'typhoid', 'chicken', 3);

-- Select from the diagnoses table where Did=2
--SELECT * FROM diagnoses WHERE Did = 2;
-- Update table diagnoses

UPDATE diagnoses
SET Type = 'antibiotic'
WHERE Did = 1;

--select * from diagnoses where Did=1;

-- Delete the Email column from the Patients table

ALTER TABLE Patients
DROP COLUMN Email;
--SELECT * FROM Patients WHERE gender = 'M';

--SELECT patients.pid, diagnoses.Did, patients.name, diagnoses.Medicine
--FROM patients
--INNER JOIN diagnoses
--ON patients.Pid = diagnoses.Pid;

CREATE INDEX idx_patients_gender ON Patients (gender);
```

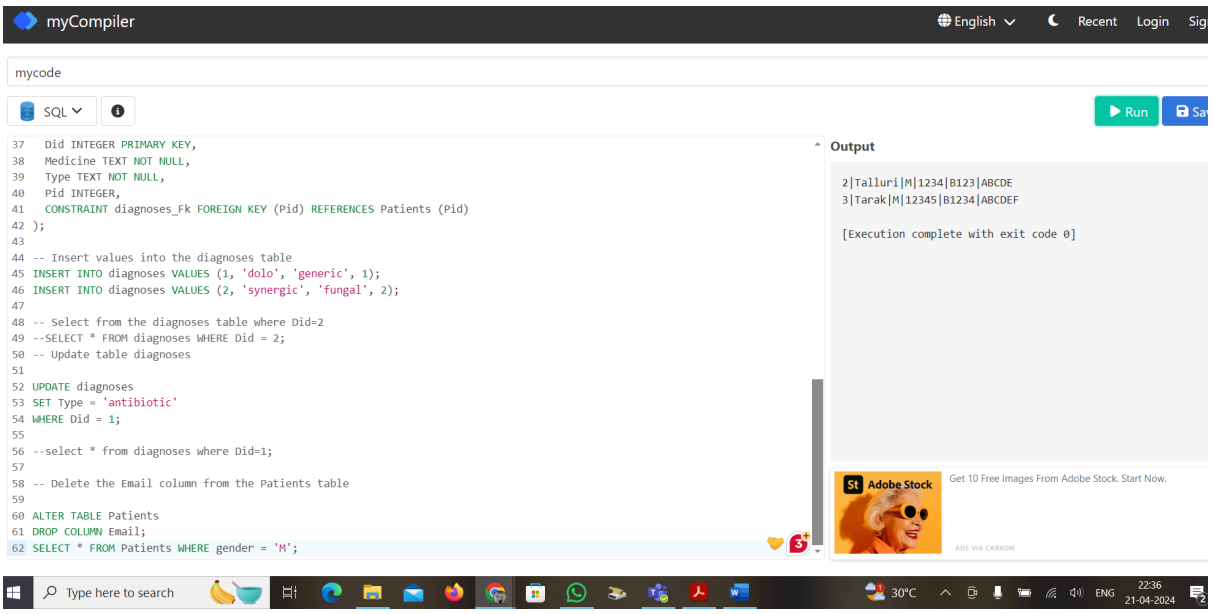



```
  Prescription TEXT NOT NULL
);

-- Insert some values into the Patients table
INSERT INTO Patients VALUES (1, 'Patchari', 'F', 124, '023@gmail.com', 'A123', 'ABCD');
INSERT INTO Patients VALUES (2, 'Talluri', 'M', 1234, '123@gmail.com', 'B123', 'ABCDE');
INSERT INTO Patients VALUES (3, 'Tarak', 'M', 12345, '12345@gmail.com', 'B1234', 'ABCDEF');

-- Select patients with gender 'M'
--SELECT * FROM Patients WHERE gender = 'M';


-- Create a table for records with a foreign key constraint referencing the Patients table
CREATE TABLE Records (
  Rid INTEGER PRIMARY KEY,
  Pid INTEGER,
  CONSTRAINT Records_FK FOREIGN KEY (Pid) REFERENCES Patients(pid)
);

-- Insert some values into the Records table
INSERT INTO Records VALUES (1, 1);
INSERT INTO Records VALUES (2, 2);

-- Select records for a specific patient (e.g., pid=2)
SELECT * FROM Records WHERE pid = 2;

```

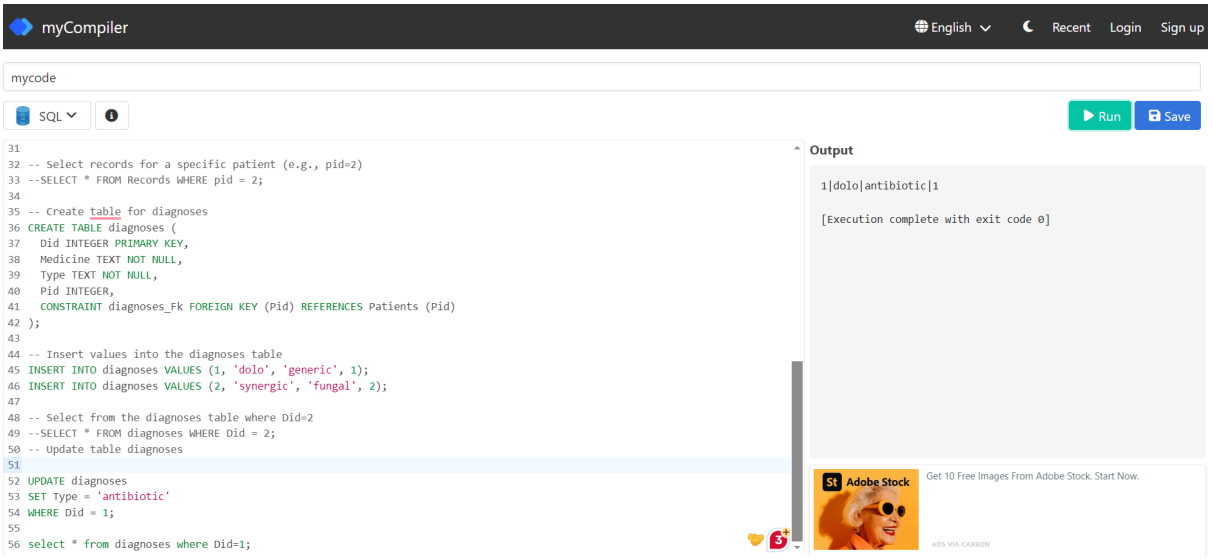



```
  CONSTRAINT Records_FK FOREIGN KEY (Pid) REFERENCES Patients(pid)
);

-- Insert some values into the Records table
INSERT INTO Records VALUES (1, 1);
INSERT INTO Records VALUES (2, 2);

-- Select records for a specific patient (e.g., pid=2)
--SELECT * FROM Records WHERE pid = 2;

-- Create table for diagnoses
CREATE TABLE diagnoses (
  Did INTEGER PRIMARY KEY,
  Medicine TEXT NOT NULL,
  Type TEXT NOT NULL,
  Pid INTEGER,
  CONSTRAINT diagnoses_Fk FOREIGN KEY (Pid) REFERENCES Patients (Pid)
);

-- Insert values into the diagnoses table
INSERT INTO diagnoses VALUES (1, 'dolo', 'generic', 1);
INSERT INTO diagnoses VALUES (2, 'synergic', 'fungal', 2);

-- Select from the diagnoses table where Did=2
```

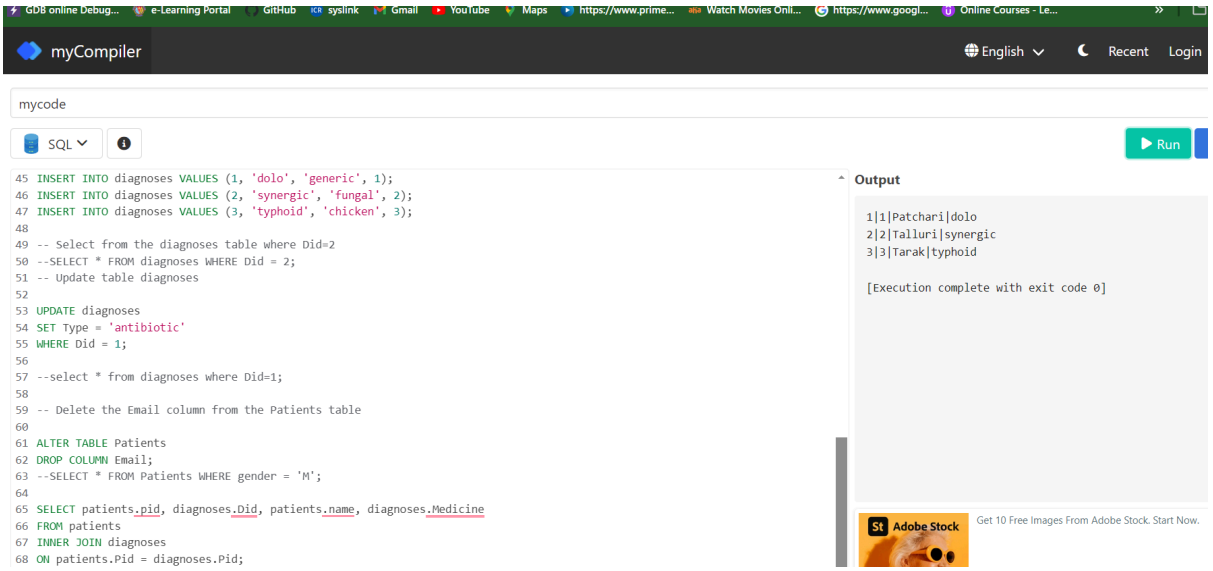
Delete



Update



Complex



Q5

Patients Table:Since the primary key column (`pid`) is already indexed by default due to its primary key constraint, there's no need to create an additional index for it. However, if you frequently query based on the `gender` column, you might consider indexing it.

CREATE INDEX idx_patients_gender ON Patients (gender);

Records Table:Since the `Pid` column in the `Records` table is a foreign key referencing the `pid` column in the `Patients` table, it's often automatically indexed for referential integrity purposes. However, if you frequently join or filter based on the `Pid` column, you may create an index explicitly.

CREATE INDEX idx_records_pid ON Records (Pid);

Diagnoses Table:Similar to the `Records` table, the `Pid` column in the `Diagnoses` table is a foreign key referencing the `pid` column in the `Patients` table. Therefore, it might already be indexed for referential integrity. If you often filter or join based on `Pid`, consider creating an index.

CREATE INDEX idx_diagnoses_pid ON diagnoses (Pid);

1. Other Indices:Depending on your query patterns and performance requirements, you may need to create additional indices for other columns that are frequently accessed or involved in join and filtering conditions.