

LAB 3

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```
-- CREATE DATABASE lab3;

-- CREATE TABLE student(
--     std_id SERIAL NOT NULL PRIMARY KEY,
--     name VARCHAR(70),
--     address VARCHAR(100),
--     email VARCHAR(100),
--     phone_number VARCHAR(16),
--     track_id INT NOT NULL

-- )

-- CREATE TABLE track(
--     track_id SERIAL NOT NULL PRIMARY KEY,
--     track_name VARCHAR(40)

-- )

-- CREATE TABLE subject(
--     subject_id SERIAL NOT NULL PRIMARY KEY,
--     name VARCHAR(50),
--     description VARCHAR(50),
--     max_score FLOAT,
--     track_id INT NOT NULL

-- )

-- CREATE TABLE exam(
--     exam_id SERIAL NOT NULL PRIMARY KEY,
--     exam_date DATE

-- )


-- ALTER TABLE student
-- ADD CONSTRAINT student_std_id
-- FOREIGN KEY (std_id)
-- REFERENCES track(track_id)

-- ALTER TABLE subject
-- ADD CONSTRAINT subject_subject_id
-- FOREIGN KEY (subject_id)
-- REFERENCES track(track_id)

-- CREATE TABLE study(
--     student_id INT NOT NULL,
```

```

--      subject_id INT NOT NULL,

--      FOREIGN KEY (student_id) REFERENCES student(std_id)
--          ON DELETE CASCADE,
--      FOREIGN KEY (subject_id) REFERENCES subject(subject_id)
--          ON DELETE CASCADE

-- )

-- CREATE TABLE take(
--     student_id INT NOT NULL,
--     exam_id INT NOT NULL,
--     student_score Float,
--     FOREIGN KEY (student_id) REFERENCES student(std_id)
--         ON DELETE CASCADE,
--     FOREIGN KEY (exam_id) REFERENCES exam(exam_id)
--         ON DELETE CASCADE

-- )

```

INSERT INTO track values

```

(1, 'java'),
(2, 'c++'),
(3, 'sql'),
(4, 'django'),
(5, 'data science')

```

INSERT INTO student values

```

(1, 'Mohamed', 'Mansoura', 'mohamed@gmail.com', '01233456899', 1),
(2, 'mai', 'Alex', 'mai@gmail.com', '01123445431', 2),
(3, 'ali', 'Mansoura', 'ali@gmail.com', '01533456899', 3),
(4, 'yara', 'Cairo', 'yara@gmail.com', '01223456899', 4),
(5, 'aya', 'Mansoura', 'aya@gmail.com', '01222356899', 5)

```

INSERT INTO subject VALUES

```

(1, 'web', 'learn web development', 90.0, 1),
(2, 'back', 'learn back end', 98.0, 2),
(3, 'front ', 'learn front end', 50.0, 3),
(4, 'data science', 'learn data science', 60.0, 4),
(5, 'ui ux', 'learn ui ux', 80.0, 5)

```

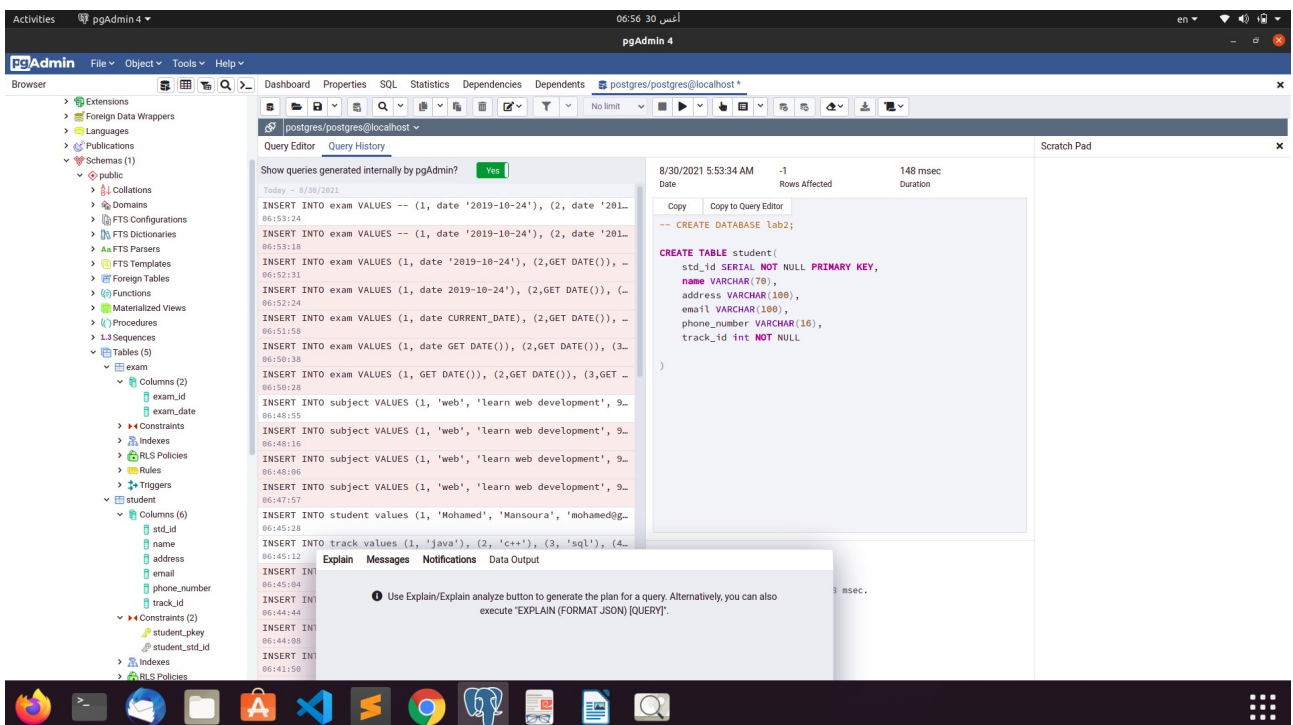
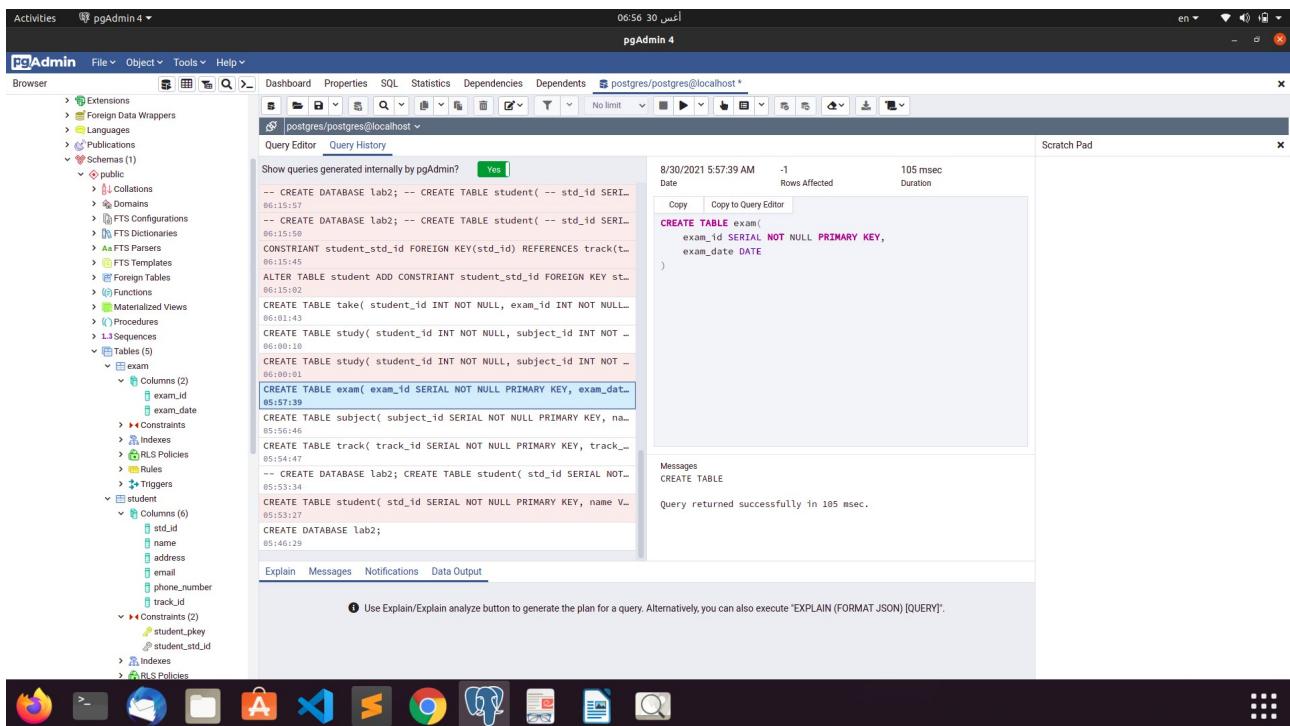
INSERT INTO exam VALUES

```

(1, date '2019-10-24'),

```

- (2, date '2018-9-24'),
- (3, date '2015-12-24'),
- (4, date '2014-8-24'),
- (5, date '2012-11-24'),



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File Object Tools Help

postgres/postgres@localhost

Query Editor Query History

postgres/postgres@localhost

Query Editor

Query History

8/30/2021 5:57:39 AM -1 105 msec

Copy Copy to Query Editor

```
CREATE TABLE exam(
  exam_id SERIAL NOT NULL PRIMARY KEY,
  exam_date DATE
)
```

Messages

CREATE TABLE

Query returned successfully in 105 msec.

Explain Messages Notifications Data Output

Use Explain/Explain analyze button to generate the plan for a query. Alternatively, you can also execute "EXPLAIN (FORMAT JSON) [QUERY]".

Activities pgAdmin 4 06:56 30 أغسطس en

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File Object Tools Help

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Query Editor Query History

postgres/postgres@localhost

Query Editor

Query History

8/30/2021 6:45:12 AM 5 102 msec

Copy Copy to Query Editor

```
INSERT INTO track values (1, 'java'), (2, 'c++'), (3, 'sql'), (4, 'python'), (5, 'data science')
```

Messages

INSERT 0 5

Query returned successfully in 102 msec.

Explain Messages Notifications Data Output

Use Explain/Explain analyze button to generate the plan for a query. Alternatively, you can also execute "EXPLAIN (FORMAT JSON) [QUERY]".

