

# LAB-9B

## 1.creating table project

The screenshot shows the DBeaver interface with a PostgreSQL 16 database selected. The left sidebar shows the database structure, with 'LAB1-B(1)' expanded. The 'Extensions' folder is highlighted. The main query editor displays the following SQL code:

```
3 project_name VARCHAR(255) NOT NULL,  
4 project_description TEXT  
5 );
```

The 'Data Output' tab is active, showing the message: 'Query returned successfully in 622 msec.' The status bar at the bottom indicates 'Total rows: 23 of 23' and 'Query complete 00:00:00.622'.

## 2.creating table users

The screenshot shows the DBeaver interface with a PostgreSQL 16 database selected. The left sidebar shows the database structure, with 'LAB1-B(1)' expanded. The 'Extensions' folder is highlighted. The main query editor displays the following SQL code:

```
4 email VARCHAR(255) UNIQUE NOT NULL,  
5 password VARCHAR(255) NOT NULL  
6 );
```

The 'Data Output' tab is active, showing the message: 'Query returned successfully in 622 msec.' The status bar at the bottom indicates 'Total rows: 23 of 23' and 'Query complete 00:00:00.622'.

## 3. Creating table task\_type

LAB1-B(1)/postgres@PostgreSQL 16

Query

```
3 type_name VARCHAR(255) NOT NULL;
4 type_description TEXT
5 );
```

Execute script (F5)

Data Output Messages Notifications

CREATE TABLE

Query returned successfully in 548 msec.

✓ Query returned successfully in 548 msec. ✕

Total rows: 23 of 23 Query complete 00:00:00.548 Ln 5, Col 3

## 4.creating table status\_tye

LAB1-B(1)/postgres@PostgreSQL 16

Query

```
1 CREATE TABLE status_type (
2     status_id SERIAL PRIMARY KEY,
3     status_name VARCHAR(255) NOT NULL;
```

Data Output Messages Notifications

CREATE TABLE

Query returned successfully in 240 msec.

Total rows: 23 of 23 Query complete 00:00:00.240 Ln 5, Col 3

## 5.creating table task

The screenshot shows a PostgreSQL IDE interface. On the left, a tree view displays the database structure: Servers (1) > PostgreSQL 16 > Databases (6) > LAB1-B(1). The 'Extensions' folder is selected. The main editor area shows a query window with the text: `);` on line 13 and `14` on line 14. A tooltip 'Execute script' with the 'F5' key is visible. Below the query window, the 'Messages' tab is active, displaying: `CREATE TABLE` and `Query returned successfully in 511 msec.`. The status bar at the bottom indicates 'Total rows: 23 of 23', 'Query complete 00:00:00.511', and 'Ln 14, Col 1'.

## 6.inserting into project

The screenshot shows the same PostgreSQL IDE interface. The query window now contains an INSERT statement: `2 ('Project A', 'Description for Project A'),` on line 2, `3 ('Project B', 'Description for Project B');` on line 3, and `4` on line 4. The 'Messages' tab displays: `INSERT 0 2` and `Query returned successfully in 247 msec.`. The status bar at the bottom indicates 'Total rows: 23 of 23', 'Query complete 00:00:00.247', and 'Ln 4, Col 1'.



LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```
14 ('Alice', 'alice@example.com', 'password123'),  
15 ('Bob', 'bob@example.com', 'password456');  
16 select *from users;
```

Data Output Messages

	user_id [PK] integer	name character varying (255)	email character varying (255)	password character varying (255)
1	1	Alice	alice@example.com	password123
2	2	Bob	bob@example.com	password456

Total rows: 2 of 2 Query complete 00:00:00.518 Ln 16, Col 19

## 8..inserting into task\_type table

LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```
2 INSERT INTO task_type (type_name, type_description) VALUES  
3 ('Bug', 'A bug task type'),  
4 ('Feature', 'A feature task type');
```

Data Output Messages

INSERT 0 2

Query returned successfully in 669 msec.

Total rows: 2 of 2 Query complete 00:00:00.669 Ln 4, Col 36

Servers (1)

- PostgreSQL 16
  - Databases (6)
    - LAB1-B(1)
      - Cast
      - Catalogs
      - Event Triggers
      - Extensions
      - Foreign Data Wrappers
      - Languages
      - Publications
      - Schemas
      - Subscription
    - LAB1-B(2)
      - Cast
      - Catalogs

LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```
3 ('Bug', 'A bug task type'),
4 ('Feature', 'A feature task type');
5 select *from Task_Type;
```

Data Output Messages

	type_id [PK] integer	type_name character varying (255)	type_description text
1	1	Bug	A bug task type
2	2	Feature	A feature task type
3	3	Bug	A bug task type
4	4	Feature	A feature task type

Successfully run. Total query runtime: 290 msec. 4 rows affected.

Total rows: 4 of 4 Query complete 00:00:00.290 Ln 5, Col 24

## 9.inserting into status\_type table

Servers (1)

- PostgreSQL 16
  - Databases (6)
    - LAB1-B(1)
      - Cast
      - Catalogs
      - Event Triggers
      - Extensions
      - Foreign Data Wrappers
      - Languages
      - Publications
      - Schemas
      - Subscription
    - LAB1-B(2)
      - Cast
      - Catalogs

LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```
3 ('Open', 'Task is open'),
4 ('In Progress', 'Task is in progress'),
5 ('Closed', 'Task is closed');
```

Data Output Messages

INSERT 0 3

Query returned successfully in 231 msec.

Total rows: 4 of 4 Query complete 00:00:00.231 Ln 5, Col 30

LAB1-B(1)/postgres@PostgreSQL 16

The session is idle and there is no current transaction.

Query Query History Notifications

```
2 INSERT INTO status_type (status_name, status_description) VALUES
3 ('Open', 'Task is open'),
4 ('In Progress', 'Task is in progress'),
5 ('Closed', 'Task is closed');
6 select *from status_type;
```

Data Output Messages

	status_id [PK] integer	status_name character varying (255)	status_description text
1	1	Open	Task is open
2	2	In Progress	Task is in progress
3	3	Closed	Task is closed

Total rows: 6 of 6 Query complete 00:00:00.386 Ln 6, Col 26

## 10. inserting into task table

LAB1-B(1)/postgres@PostgreSQL 16

No limit

Execute script F5

Query Query History Notifications

```
2 'Description for Task 1', '2024-06-15', 1, 'High', TRUE, 'No comments'),
3 'Description for Task 2', '2024-06-15', 2, 'Medium', FALSE, 'No comments');
```

Data Output Messages

INSERT 0 2

Query returned successfully in 119 msec.

Total rows: 4 of 4 Query complete 00:00:00.119 Ln 3, Col 96

Servers (1)  
 PostgreSQL 16  
 Databases (6)  
 LAB1-B(1)  
 Casts  
 Catalogs  
 Event Triggers  
 Extensions  
 Foreign Data Wrappers  
 Languages  
 Publications  
 Schemas  
 Subscriptions  
 LAB1-B(2)  
 Casts  
 Catalogs

LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```

1 INSERT INTO task (list_id, project_id, user_id, task_title, task_description
2 (1, 1, 1, 'Task 1', 'Description for Task 1', '2024-06-01', 1, 'High', TRUE,
3 (2, 2, 2, 'Task 2', 'Description for Task 2', '2024-06-15', 2, 'Medium', FAL
4 select *from task;
  
```

Data Output Messages

	task_id [PK] integer	list_id integer	project_id integer	user_id integer	task_title character varying (255)	task_description text
1		1	1	1	Task 1	Description for Task 1
2		2	2	2	Task 2	Description for Task 2

Total rows: 4 of 4 Query complete 00:00:00.238 Ln 4, Col 19

11.ALTER TABLE task  
 ADD CONSTRAINT fk\_project  
 FOREIGN KEY (project\_id)  
 REFERENCES project (project\_id);

Servers (1)  
 PostgreSQL 16  
 Databases (6)  
 LAB1-B(1)  
 Casts  
 Catalogs  
 Event Triggers  
 Extensions  
 Foreign Data Wrappers  
 Languages  
 Publications  
 Schemas  
 Subscriptions  
 LAB1-B(2)  
 Casts  
 Catalogs

LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```

1 ALTER TABLE task
2 ADD CONSTRAINT fk_project
3 FOREIGN KEY (project_id)
4 REFERENCES project (project_id);
  
```

Data Output Messages

ALTER TABLE

Query returned successfully in 508 msec.

Total rows: 6 of 6 Query complete 00:00:00.508 Ln 4, Col 33

12.Select \*from task



The screenshot shows the PostgreSQL GUI interface. On the left, the 'Extensions' folder is selected under 'LAB1-B(1)'. The main pane displays a 'Data Output' table with the following data:

	task_id [PK] integer	list_id integer	project_id integer	user_id integer	task_title character varying (255)	task_description text
1		1	1	1	Task 1	Description for Task 1
2		2	2	2	Task 2	Description for Task 2
3		3	1	1	Task 1	Description for Task 1
4		4	2	2	Task 2	Description for Task 2
5		5	[null]	1	Task 1	Description for Task 1

At the bottom, it indicates 'Total rows: 12 of 12' and 'Query complete 00:00:00.218'.

13.ALTER TABLE task  
ADD CONSTRAINT fk\_user  
FOREIGN KEY (user\_id)  
REFERENCES users (user\_id);

The screenshot shows the PostgreSQL GUI interface. On the left, the 'Extensions' folder is selected under 'LAB1-B(1)'. The main pane displays 'Messages' with the following output:

```

NOTICE: relation "project" already exists, skipping
NOTICE: relation "users" already exists, skipping
NOTICE: relation "task_type" already exists, skipping
NOTICE: relation "status_type" already exists, skipping
NOTICE: relation "task" already exists, skipping
DO

Query returned successfully in 736 msec.

```

At the bottom, it indicates 'Total rows: 2 of 2' and 'Query complete 00:00:00.736'.

14.Select \*from project

LAB1-B(1)/postgres@PostgreSQL 16

Query

```

103
104 -- Queries to Check the Data
105 SELECT * FROM task;
106 SELECT * FROM project;
107

```

Execute script (F5)

Data Output

	project_id [PK] integer	project_name character varying (255)	project_description text
1	1	Project A	Description for Project A
2	2	Project B	Description for Project B
3	3	Project A	Description for Project A

Total rows: 10 of 10 Query complete 00:00:00.323 Ln 106, Col 23

15.ALTER TABLE task  
 ADD CONSTRAINT fk\_task\_status  
 FOREIGN KEY (task\_status)  
 REFERENCES status\_type (status\_id);

LAB1-B(1)/postgres@PostgreSQL 16

Query

Data Output Messages

```

NOTICE: relation "project" already exists, skipping
NOTICE: relation "users" already exists, skipping
NOTICE: relation "task_type" already exists, skipping
NOTICE: relation "status_type" already exists, skipping
NOTICE: relation "task" already exists, skipping
DO
Query returned successfully in 736 msec.

```

Total rows: 2 of 2 Query complete 00:00:00.736 Ln 5, Col 29

16.Select \*from users

Servers (1)

- PostgreSQL 16
  - Databases (6)
    - LAB1-B(1)
      - Cast
      - Catalogs
      - Event Triggers
      - Extensions
      - Foreign Data Wrappers
      - Languages
      - Publications
      - Schemas
      - Subscriptions
    - LAB1-B(2)
      - Cast
      - Catalogs

LAB1-B(1)/postgres@PostgreSQL 16

Query Query History Notifications

```
104 -- Queries to Check the Data
105 SELECT * FROM task;
106 SELECT * FROM project;
107 SELECT * FROM users;
```

Data Output Messages

	user_id [PK] integer	name character varying (255)	email character varying (255)	password character varying (255)
1	1	Alice	alice@example.com	password123
2	2	Bob	bob@example.com	password456

Total rows: 2 of 2 Query complete 00:00:00.178 Ln 107, Col 20

## 17.ER -diagrams



