# Peer-graded Assignment: Peer Review: Peer Reviewed Assignment

ⓘ  It looks like this is your first peer-graded assignment. Learn more       ✕

Instructions       **My submission**       Discussions

## DBA Project

Submitted on July 16, 2024                                    Shareable Link

**PROMPT**

**Task 1.1:** Submit the screenshot for the task – Find the settings in PostgreSQL. **(1pt)**

Upload the **max-connections.jpg** (or .png) file for your peers to review.

max connections

```
63  #port = 5432                    # (change requires restart)
64  max_connections = 100           # (change requires restart)
65  #superuser_reserved_connections = 3 # (change requires restart)
66  #unix_socket_directories = '/var/run/postgresql'   # comma-separated list of directories
67                                  # (change requires restart)
68  #unix_socket_group = ''         # (change requires restart)
```

**RUBRIC**

Did the learner identify the maximum number of connections allowed for the postgres server on theia lab?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

**TIP:**
**If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).**

⦿   **1 point**                                    IN
Correct. The learner has identified the "max_connections" setting in the configuration file. The setting and its value are clearly visible in the screenshot.

○   0 points
Incorrect. The learner did not submit the screenshot, or the "max_connections" setting is not visible in the screenshot.

**PROMPT**

**Task 1.2:** Submit the screenshot for the task – Create a User. **(1pt)**

Upload the **create-user.jpg** (or .png) file for your peers to review.

create users

**RUBRIC**

Did the learner create a user named "backup_operator"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

```
postgres=# CREATE USER backup_operator WITH PASSWORD '123';
CREATE ROLE
postgres=#
```

**1 point**

Correct. The learner has correctly used the "CREATE USER" command and specified the user name correctly and mentioned a valid password.

○ 0 points
Incorrect. The learner did not submit the screenshot, or the "CREATE USER" command was used incorrectly.

---

**PROMPT**

**Task 1.3:** Submit the screenshot for the task – Create a Role. **(1pt)**

Upload the **create-role.jpg** (or .png) file for your peers to review.

create role

```
postgres=# CREATE USER backup_operator WITH PASSWORD '123';
CREATE ROLE
postgres=# CREATE ROLE backup;
CREATE ROLE
```

**RUBRIC**

Did the learner create a role named "backup"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

◉ **1 point**

Correct. The learner has correctly used the "CREATE ROLE" command and specified the role name as "backup".

○ 0 points
Incorrect. The learner did not submit the screenshot, or the "CREATE ROLE" command was not used correctly.

---

**PROMPT**

**Task 1.4:** Submit the screenshot for the task – Grant privileges to the role. **(2pts)**

Upload the **grant-privs-to-role.jpg** (or .png) file for your peers to review.

grant-privs-to-role

```
postgres=# GRANT CONNECT ON DATABASE tolldata to backup;
GRANT
postgres=# \c tolldata;
psql (14.5 (Ubuntu 14.5-1.pgdg18.04+1), server 13.2)
You are now connected to database "tolldata" as user "postgres".
tolldata=# GRANT SELECT ON ALL TABLES IN SCHEMA toll TO backup;
GRANT
```

**RUBRIC**

Did the learner correctly grant the mentioned privileges to the backup role?

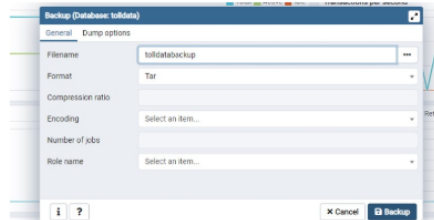Review the screenshot uploaded by the learner and grade this question based on the criteria below.

◉ **2 points**

Correct. The learner has correctly performed both the tasks below.

- Used the GRANT CONNECT statement and specified database as "tolldata" and role as backup.
- Used the GRANT SELECT statement and specified schema as "toll" and role as backup.

○ 1 point
Partially Correct. The learner has correctly performed at least one of the two tasks below.

- Used the GRANT CONNECT statement and specified database as "tolldata" and role

as backup.

- Used the GRANT SELECT
  statement and specified
  schema as "toll" and role as
  backup.

○ 0 points
Incorrect. The learner did not submit
the screenshot or did not perform
any of the tasks.

---

**PROMPT**

**Task 1.5:** Submit the screenshot for the task –
Grant role to a user. **(1pt)**

Upload the **grant-role.jpg** (or .png) file for your
peers to review.

grant role

```
postgres=# CREATE USER backup_operator WITH PASSWORD '123';
CREATE ROLE
postgres=# CREATE ROLE backup;
CREATE ROLE
```

**RUBRIC**

Did the learner correctly grant the role "backup"
to "backup_operator"?

Review the screenshot uploaded by the learner
and grade this question based on the criteria
below.

◉ **1 point**                                    IN
Correct. The learner has correctly
used the "GRANT" command and
specified the role name as "backup"
and user name as
"backup_operator".

○ 0 points
Incorrect. The learner did not submit
the screenshot, or the "GRANT"
command was not used correctly.

---

**PROMPT**

**Task 1.6:** Submit the screenshot for the task –
Backup a database on PostgreSQL server. **(1pt)**

Upload the **backup-database.jpg** (or .png) file for
your peers to review.

backup-database



**RUBRIC**

Did the learner correctly backup the database
"tolldata" using PGADMIN GUI?

Review the screenshot uploaded by the learner
and grade this question based on the criteria
below.

◉ **1 point**                                    IN
Correct. The screenshot clearly
shows the backup window with
filename mentioned as
"tolldatabackup.tar" and format
mentioned as "Tar".

○ 0 points
Incorrect. The learner did not submit
the screenshot, or only one of the
filename or format is mentioned
correctly.

---

**PROMPT**

**Task 2.1:** Submit the screenshot for the task –
Restore MySQL server using a previous backup.
**(1pt)**

**RUBRIC**

Did the learner successfully restore data from a
previous backup?

Review the screenshot uploaded by the learner

Upload the **database-restore.jpg** (or .png) file for your peers to review.

database-restore

○ **1 point**    IN
Correct. The screenshot shows a table named "billdata".

○ 0 points
Incorrect. The learner did not submit the screenshot, or the table named "billdata" is not present.

---

**PROMPT**

**Task 2.2:** Submit the screenshot for the task – Find the data table size. **(1pt)**

Upload the **table-data-size.jpg** (or .png) file for your peers to review.

table data size



**RUBRIC**

Did the learner identify the size of the "billdata" table correctly?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

○ **1 point**    IN
Correct. The screenshot shows the size of the table "billdata" as 6832128 (bytes).

○ 0 points
Incorrect. The learner did not submit the screenshot, or the size of the table "billdata" is not visible in the screenshot.
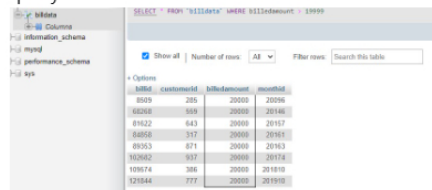
---

**PROMPT**

**Task 2.3:** Submit the screenshot for the task – Baseline query performance. **(1pt)**

Upload the **query-baseline.jpg** (or .png) file for your peers to review.

query baseline



**RUBRIC**

Did the learner correctly write a query to select all rows with a billedamount > 19999 in table "billdata"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

**Take a note of the query run time from this screenshot as you will refer back to it later in the peer review.**

○ **1 point**    IN
Correct. The screenshot shows a correct select statement with 8 rows of output and the query run time.

○ 0 points
Incorrect. The learner did not submit the screenshot, or the query is wrong or does not show 8 rows of output and the query run time.

---

**PROMPT**

**Task 2.4:** Submit the screenshot for the task –

**RUBRIC**

Did the learner create the index correctly?

Create an index. **(1pt)**

Upload the **index-creation.jpg** (or .png) file for your peers to review.

index creation

```
mysql> CREATE INDEX billedamount ON billdata(billedamount);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ◉ **1 point**    IN
  Correct. The learner has correctly used the "CREATE INDEX" statement and mentioned the index name as "billedamount", table name as "billdata" and column name as "billedamount".

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or the "CREATE INDEX" statement is not correct.

---

**PROMPT**

**Task 2.5:** Submit the screenshot for the task – Document the improvement in query performance. **(1pt)**

Upload the **query-indexed.jpg** (or .png) file for your peers to review.

query indexed

| billid | customerid | billedamount | monthid |
|--------|-----------|--------------|---------|
| 8509 | 285 | 20000 | 20096 |
| 68268 | 559 | 20000 | 20146 |
| 81622 | 643 | 20000 | 20157 |
| 84858 | 317 | 20000 | 20161 |
| 89353 | 871 | 20000 | 20163 |
| 102682 | 937 | 20000 | 20174 |
| 109574 | 386 | 20000 | 201810 |
| 121844 | 777 | 20000 | 201910 |

**RUBRIC**

Did the learner correctly write a query to select all rows with a billedamount > 19999 in table "billdata"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ◉ **1 point**    IN
  Correct. The query time is at least half that of the time recorded in task 2.3.

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or the query time is the same as the time recorded in task 2.3.

---

**PROMPT**

**Task 2.6:** Submit the screenshot for the task – Find supported storage engines. **(1pt)**

Upload the **storage-engines.jpg** (or .png) file for your peers to review.

storage engines

**RUBRIC**

Did the learner identify if the current MySQL server supports the MyISAM storage engine or not?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ◉ **1 point**    IN
  Correct. The screenshot shows that MyISAM storage engine is supported.

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or MyISAM is not present in the output.

---

**PROMPT**

**Task 2.7:** Submit the screenshot for the task – Find the storage engine of a table. **(1pt)**

**RUBRIC**

Did the learner correctly identify the storage engine of the table "billdata"?

Upload the **storage-engine-type.jpg** (or .png) file for your peers to review.

storage engine type

```
mysql> SELECT ENGINE
    -> FROM information_schema.TABLES
    -> WHERE TABLE_SCHEMA = 'billing'
    -> AND TABLE_NAME = 'billdata';
+--------+
| ENGINE |
+--------+
| InnoDB |
+--------+
1 row in set (0.00 sec)
```

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ◉ **1 point**   IN
  Correct. The screenshot shows the storage engine of the table "billdata" as InnoDB.

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or the output does not show InnoDB.

---

**PROMPT**

**Task 3.1:** Submit the screenshot for the task – Restore the table "billing". **(2pts)**

Upload the **restore-table.jpg** (or .png) file for your peers to review.

restore table

132,000 132,000 0
Rows read  Rows loaded  Rows rejected

The data load job succeeded.
You can now work with your data.

**RUBRIC**

Did the learner correctly restore the table "billing"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ◉ **2 points**   IN
  Correct. The screenshot shows all the items below:
  - 132000 rows read
  - 132000 rows loaded
  - 0 rows rejected
  - 0 Errors

- ○ 1 point
  Partially Correct. The screenshot shows one or more errors.

- ○ 0 points
  Incorrect. The learner did not submit the screenshot or zero rows were loaded.

---

**PROMPT**

**Task 3.2:** Submit the screenshot for the task – Create a view named "basicbilldetails" with the columns customerid, month, billedamount. **(1pt)**

Upload the **create-view.jpg** (or .png) file for your peers to review.

create view

**RUBRIC**

Did the learner correctly create the view "basicbilldetails"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ◉ **1 point**   IN
  Correct. The learner has correctly used the "CREATE VIEW" statement and specified the columns "customerid", "month", "billedamount" and specified the table name "billing".

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or wrongly

**PROMPT**

**Task 3.3:** Submit the screenshot for the task – Baseline query performance. **(1pt)**

Upload the **query-base-line-db2.jpg** (or .png) file for your peers to review.



**RUBRIC**

Did the learner correctly record the query run time?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ● **1 point**    IN
  Correct. The learner has correctly used the "SELECT" statement with a "WHERE" clause to filter for billedamount of 19929. The output rows and run time are clearly visible.

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or the output rows and run time are missing.

**PROMPT**

**Task 3.4:** Submit the screenshot for the task – Create an index. **(1pt)**

Upload the **index-creation-db2.jpg** (or .png) file for your peers to review.

index creation
No uploaded file

**RUBRIC**

Did the learner correctly create the index named "billingamount"?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ● **1 point**    IN
  Correct. The screenshot shows the "CREATE INDEX" statement with name as "billingamount", table name as "billing" and column name as "billedamount".

- ○ 0 points
  Incorrect. The learner did not submit the screenshot, or the index, column or table name is incorrect.

**PROMPT**

**Task 3.5:** Submit the screenshot for the task – Document the improvement in query performance. **(1pt)**

Upload the **query-after-index.jpg** (or .png) file for your peers to review.

query after index



**RUBRIC**

Did the learner correctly record the query run time?

Review the screenshot uploaded by the learner and grade this question based on the criteria below.

- ● **1 point**    IN
  Correct. The learner has correctly used the "SELECT" statement with a "WHERE" clause to filter for "billedamount" of 19929.  The output rows and run time are clearly visible.

| 598 | Company | United Kingdom | Training | 2015-9 | 19929 |

○ 0 points
Incorrect. The learner did not submit the screenshot, or the output rows and run time are missing.

**Start new attempt**

## Comments

Comments left for the learner are visible only to that learner and the person who left the comment.

SS

Share your thoughts...

👍 **Like**   👎 **Dislike**   🚩 **Report an issue**