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1 REM Author: Henry
 2 REM Date: 2024.06.12
 3 REM Objective:
 4 REM Environment: Ubuntu Server 22.04 LTS, MySQL Workbench 8.0 CE, MySQL Community
    Server 8.0.37-0ubuntu0.22.04.3 (ubuntu)
 5
 6
 7
   REM Before you begin
   1. All commands are executed inside the MySQL shell as root or administrative user.
 9 2. The minimum privileges required to create user accounts and define their privileges is
    CREATE USER and GRANT.
10 3. To access the MySQL shell type the following command and enter your MySQL root user
    password when prompted:
       $ mysql -u root -p
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12
13
14
    REM Create a new MySQL User Account
    1. A user account in MySQL consists of two parts: user name and host name.
15
    2. To create a new MySQL user account, run the following command:
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       mysql>CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'user password';
17
18
19
    3. To grant access from another host, change the hostname part with the remote machine IP
20
       -For example, to grant access from a machine with IP 10.8.0.5 you would run:
21
       mysql>CREATE USER 'newuser'@'10.8.0.5' IDENTIFIED BY 'user password';
22
23
    4. To create a user that can connect from any host, use the '%' wildcard as a host part:
24
       mysql>CREATE USER 'newuser'@'%' IDENTIFIED BY 'user password';
25
26
    REM Grant Privileges to a MySQL User Account
27
    1. There are multiple types of privileges that can be granted to a user account.
28
29
    2. The most commonly used privilege are:
       1)ALL PRIVILEGES – Grants all privileges to a user account.
30
       2)CREATE - The user account is allowed to create databases and tables.
31
       3)DROP - The user account is allowed to drop databases and tables.
32
       4)DELETE - The user account is allowed to delete rows from a specific table.
33
       5)INSERT - The user account is allowed to insert rows into a specific table.
34
35
       6)SELECT – The user account is allowed to read a database.
36
       7) UPDATE - The user account is allowed to update table rows.
37
    3. To grant specific privileges to a user account, use the following syntax:
38
       mysql>GRANT permission1, permission2 ON database_name.table_name TO
39
       'database user'@'localhost';
40
    4. Examples:
41
42
       1) Grand all privileges to a user account over a specific database:
          mysql>GRANT ALL PRIVILEGES ON database_name.* TO 'database_user'@'localhost';
43
44
45
       2) Grand all privileges to a user account on all databases:
          mysql>GRANT ALL PRIVILEGES ON *.* TO 'database_user'@'localhost';
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       3) Grand all privileges to a user account over a specific table from a database:
49
          mysql>GRANT ALL PRIVILEGES ON database name.table name TO 'database user'@
          'localhost';
50
51
       4) Grant multiple privileges to a user account over a specific database:
          mysql>GRANT SELECT, INSERT, DELETE ON database name.* TO database user@
52
          'localhost';
53
54
    REM Display MySQL User Account Privileges
55
    -To find the privilege(s) granted to a specific MySQL user account, use the SHOW GRANTS
56
    statement:
       mysgl>SHOW GRANTS FOR 'database user'@'localhost';
57
58
59
60
    REM Revoke Privileges from a MySQL User Account
    -To revoke all privileges from a user account over a specific database, run the following
61
    command:
       mysql>REVOKE ALL PRIVILEGES ON database_name.* FROM 'database_user'@'localhost';
62
63
64
65
    REM Remove an Existing MySQL User Account
    -To delete a MySQL user account use the DROP USER statement:
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67
       mysql>DROP USER 'user'@'localhost'
68
69
70
    REM ALTER USER
71
    1. The ALTER USER statement modifies MySQL accounts.
72
    2. Syntax
73
       ALTER USER [IF EXISTS] user IDENTIFIED BY 'password string';
74
75
    REM User Check
76
77
       mysql>SELECT host, user, plugin, authentication string, password last changed FROM
       mysql.user;
78
79
80
    REM Saving Your Changes
    -As a final step following any updates to the user privileges, be sure to save the changes by
81
    issuing the FLUSH PRIVILEGES command from the mysql prompt:
       mysql>FLUSH PRIVILEGES;
82
83
```