Assignment 6: Create a new database user with specific privileges using the CREATE USER and GRANT commands. Then, write a script to REVOKE certain privileges and DROP the user.

SOLUTION:

Script to Create a New User and Grant Privileges:

-- Create a new user

```sql
CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'password';
```

-- Grant specific privileges to the user

```sql
GRANT SELECT, INSERT, UPDATE, DELETE ON database_name.* TO 'newuser'@'localhost';
```

-- Flush privileges to ensure that all changes take effect

```sql
FLUSH PRIVILEGES;
```

### Script to Revoke Privileges and Drop the User

sql

-- Revoke specific privileges from the user

REVOKE INSERT, UPDATE ON database_name.* FROM 'newuser'@'localhost';

-- Drop the user

DROP USER 'newuser'@'localhost';

-- Flush privileges to ensure that all changes take effect

FLUSH PRIVILEGES;

EXPLANATION:

1. *Creating the User:*

   sql

   CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'password';

   This command creates a new user named newuser with the password password and restricts the user's access to the localhost.

2. *Granting Privileges:*

```sql
GRANT SELECT, INSERT, UPDATE, DELETE ON database_name.* TO 'newuser'@'localhost';
```

This command grants SELECT, INSERT, UPDATE, and DELETE privileges on all tables within database_name to the new user.

3. *Flushing Privileges:*

```sql
FLUSH PRIVILEGES;
```

This command reloads the grant tables in MySQL, ensuring that the changes made take effect immediately.

4. *Revoking Privileges:*

```sql
REVOKE INSERT, UPDATE ON database_name.* FROM 'newuser'@'localhost';
```

This command revokes the INSERT and UPDATE privileges on all tables within database_name from the user.

5. *Dropping the User:*

sql

DROP USER 'newuser'@'localhost';

This command removes the user newuser from the database.

Remember to replace 'newuser', 'localhost', 'password', and database_name with your actual username, host, password, and database name respectively.