

TUTORIJAL ZA RAD SA MYSQL SISTEMOM ZA RUKOVANJE BAZAMA PODATAKA (SRBP) – DEO 6

Kreiranje korisnika baze podataka

Kreiranje korisnika baze podataka se može izvršiti na dva načina. Prvi način - u "Navigation panel" odeljku PHPMyAdmin softvera, izabere radna baza podataka do koje se zatim otvara konekcija. U glavnom meniju se u listi opcija "More" izabere stavka za korisnike "Privileges".

The screenshot shows the phpMyAdmin interface for a database named 'muzej2020'. In the top right corner, there is a 'More' dropdown menu. The 'Privileges' option is highlighted with a red box and a blue arrow pointing to it from the top left. The main area displays a table of tables with various actions like Browse, Structure, Search, Insert, etc.

Prikazuje se spisak okidača korisnika kreiranih i definisanih na nivou servera baze podataka. U primeru na slici ispod već postoje određeni korisnički i sistemski nalozi/korisnici. U odeljku "New" bira se link "Add user account" za kreiranje novog korisnika.

The screenshot shows the 'Users having access to "muzej2020"' table. A red box highlights the 'New' button at the bottom left of the table area, with a blue arrow pointing to it from the top left. The table lists several users with their privileges and grant status. At the bottom of the table, there is a section labeled 'With selected:' with an 'Export' button.

Otvara se stranica za definisanje osobina korisnika. Upisuje se ime korisnika "User name", bira se vrsta hosta ili upisuje njegov naziv (izabrali localhost ili % za pristup sa bilo kog hosta). Tu su još i polja za upis korisničke šifre ("Password") sa informacijom o njenoj dužini složenosti ("Strength"), zatim taster za generisanje proizvoljne (tzv. random, slučajne) šifre korisnika.

The screenshot shows the 'Add user account' interface in phpMyAdmin. The 'User name:' field is populated with 'administrator'. A warning message states: 'An account already exists with the same username but possibly a different hostname.' Below this, there are fields for 'Host name:', 'Password:', 'Re-type:', and 'Authentication Plugin'. The 'Generate password:' button is visible. At the bottom, there's a section for creating a database with the same name and granting all privileges, which is currently unchecked.

Niže na stranici su grupe za izbor prava, tj. privilegija korisnika and izabranom bazom podataka: "Data" – pristup i ažuriranje podataka, "Structure" - izmena i definisanje strukture baze podataka i njenih objekata, "Administration" – mogućnosti za administraciju baze podataka i "Resource limits" - ograničenja resursa u pogledu maksimalnog broja upita, ažuriranje baze, broja konekcija za sat vremena.

The screenshot shows the 'Global privileges' interface in phpMyAdmin. It displays four main sections: 'Data' (with checkboxes for SELECT, INSERT, UPDATE, DELETE, and FILE), 'Structure' (with checkboxes for CREATE, ALTER, INDEX, DROP, and others), 'Administration' (with checkboxes for GRANT, SUPER, and various system-related options like PROCESS, RELOAD, SHUTDOWN, SHOW DATABASES, LOCK TABLES, REFERENCES, and CREATE USER), and 'Resource limits' (with input fields for MAX QUERIES PER HOUR, MAX UPDATES PER HOUR, MAX CONNECTIONS PER HOUR, and MAX USER CONNECTIONS). A note at the top states: 'MySQL privilege names are expressed in English.'

Potrebno je izabrati željene ili potrebne karakteristike za korisnika i pritisnuti taster "Go" za završetak kreiranja korisnika baze podataka.

The screenshot shows the phpMyAdmin interface for creating a new user. In the top right, there are two columns of checkboxes for privileges: SHOW VIEW, CREATE ROUTINE, ALTER ROUTINE, EXECUTE, CREATE VIEW, EVENT, and TRIGGER on the left; and SHOW DATABASES, LOCK TABLES, REFERENCES, REPLICATION CLIENT, REPLICATION SLAVE, and CREATE USER on the right. Below these are SSL configuration fields: REQUIRE NONE (selected), REQUIRE SSL, REQUIRE X509, and SPECIFIED. At the bottom right of the main panel is a red-bordered 'Go' button.

Sledi prikaz SQL komandi "CREATE USER" za kreiranje novog korisnika i "GRANT" za dodelu prava pristupa, kao i obavezan prikaz poruke o uspešnom ili neuspešnom kreiranju korisnika, hosta i baze podataka.

The screenshot shows the phpMyAdmin interface after a user has been created. A green message bar at the top states "You have added a new user." Below it, a red box highlights a SQL command in the console area:

```
CREATE USER 'administrator'@'%' IDENTIFIED VIA mysql_native_password USING '*'; GRANT SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, FILE, INDEX, ALTER, SHOW DATABASES, CREATE TEMPORARY TABLES, LOCK TABLES, CREATE VIEW, EVENT, TRIGGER, SHOW VIEW, CREATE ROUTINE, ALTER ROUTINE, CREATE USER, EXECUTE ON *.* TO 'administrator'@'%'; REQUIRE NONE WITH GRANT OPTION MAX_QUERIES_PER_HOUR 10 MAX_CONNECTIONS_PER_HOUR 10 MAX_UPDATES_PER_HOUR 5 MAX_USER_CONNECTIONS 0; GRANT ALL PRIVILEGES ON `muzej2020`.* TO 'administrator'@'%';
```

 The main panel shows the "Edit privileges" section for the 'administrator' user, with checkboxes for Data (SELECT, INSERT, UPDATE, DELETE) and Structure (CREATE, ALTER, INDEX, DROP, CREATE TEMPORARY TABLES) selected. The Administration section is partially visible with checkboxes for GRANT, LOCK TABLES, and REFERENCES.

Kada se ponovo aktivira kartica "Privileges" može se videti, kao na sledećoj slici, da je korisnik uspešno dodat u listu, a njegova prava, tj. privilegije prikazane su u tabeli:

Screenshot of phpMyAdmin showing the 'Privileges' tab for the 'muzej2020' database. The table lists users with their privileges. The 'administrator' user, which was just added, is highlighted with a red box. A blue arrow points from the 'Edit privileges' link for this user to the next screenshot.

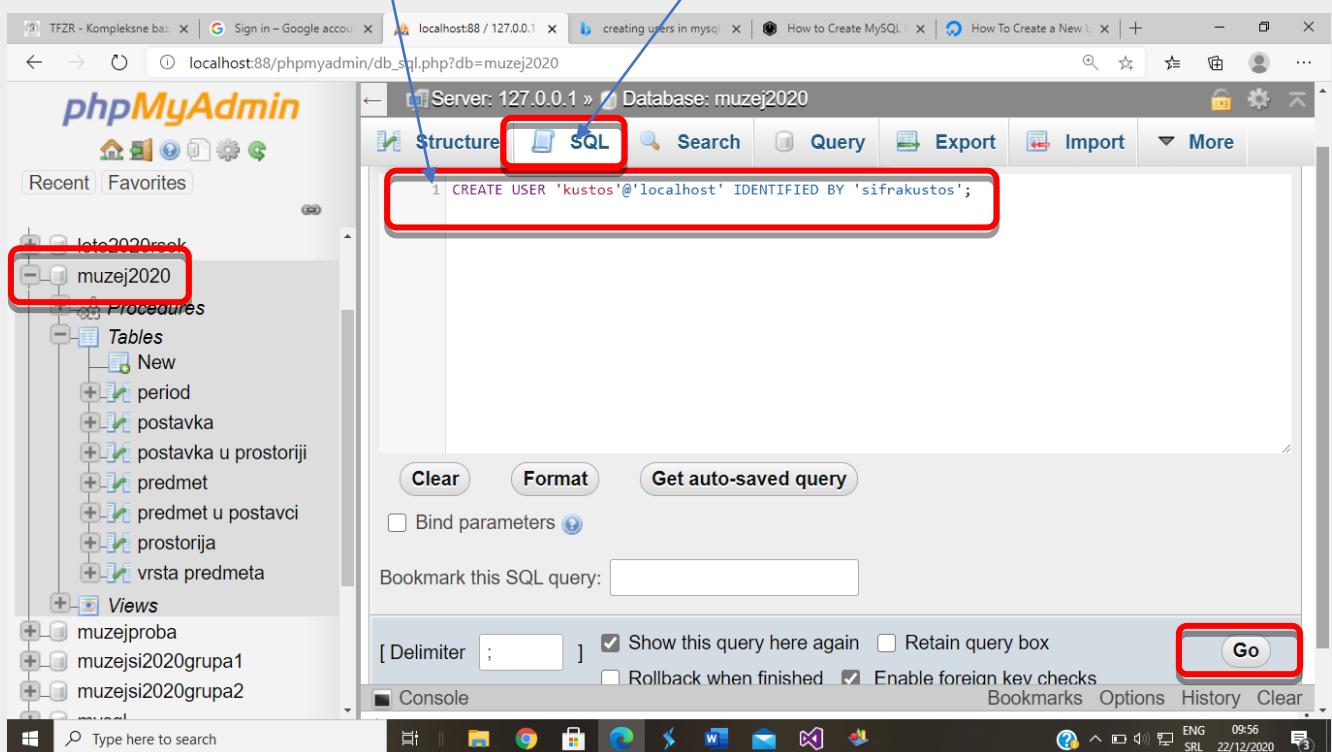
User name	Host name	Type	Privileges	Grant	Action
administrator	%	global	SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, INDEX, ALTER, CREATE TEMPORARY TABLES, LOCK TABLES, CREATE VIEW, EVENT, TRIGGER, SHOW VIEW, CREATE ROUTINE, ALTER ROUTINE, EXECUTE	Yes	Edit privileges Export
muzejadmin	localhost	specific	ALL PRIVILEGES	No	Edit privileges Export
muzejskivodic	localhost	database-specific	ALL PRIVILEGES	No	Edit privileges Export
root	127.0.0.1	global	ALL PRIVILEGES	Yes	Edit privileges Export
root	:1	global	ALL PRIVILEGES	Yes	Edit privileges Export
root	localhost	global	ALL PRIVILEGES	Yes	Edit privileges Export

"Export" je opcija za generisanje SQL komandi GRANT za dodelu prava korisnicima baze podataka (slika ispod). "Edit privileges" otvara stranicu za izmenu prava korisnika.

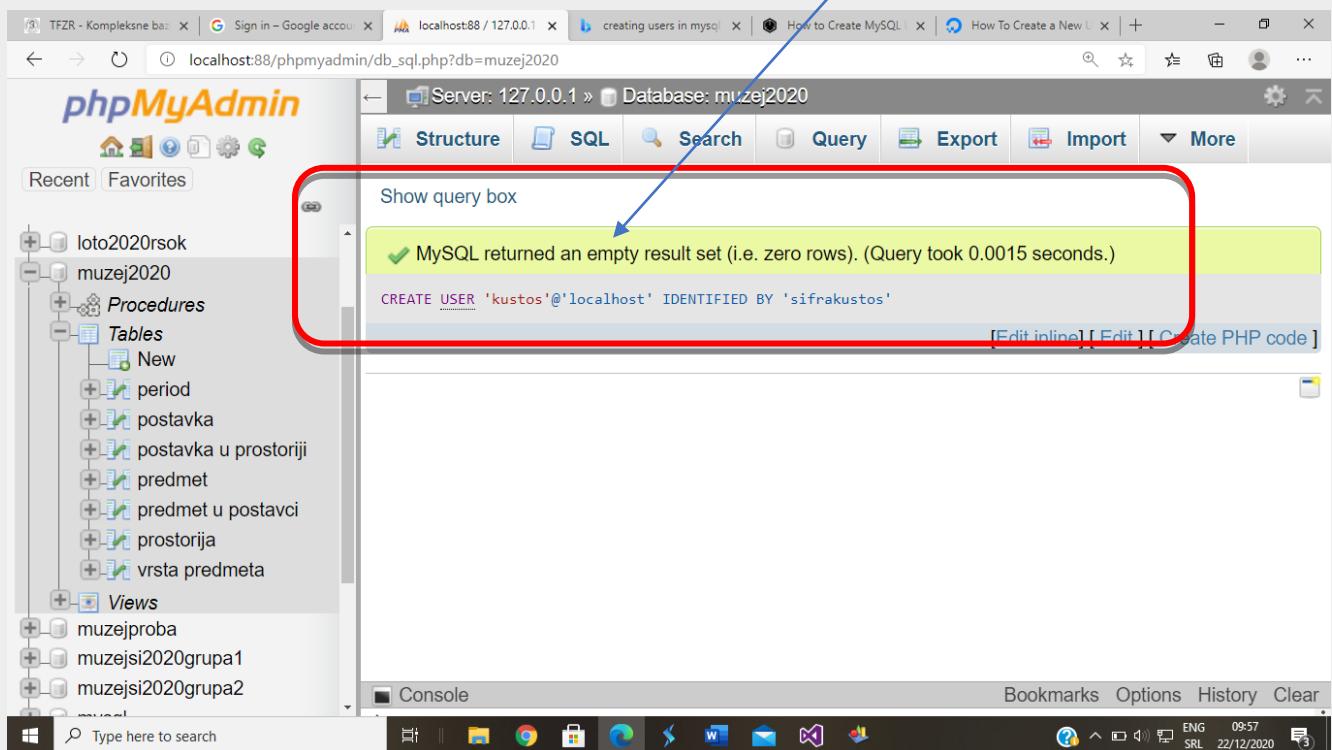
Screenshot of phpMyAdmin showing the 'Edit privileges' dialog for the 'administrator' user. The dialog displays the generated SQL GRANT commands:

```
1 GRANT SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, FILE, INDEX, ALTER, SHOW DATABASES, CREATE TEMPORARY TABLES, LOCK TABLES, EXECUTE, CREATE VIEW, SHOW VIEW, CREATE ROUTINE, ALTER ROUTINE, CREATE USER, EVENT, TRIGGER ON *.* TO 'administrator'@'%' IDENTIFIED BY PASSWORD '3A7BF5930FDD0A878FBFCDBFE2067A4CDE641B89' WITH GRANT OPTION  
MAX_QUERIES_PER_HOUR 10 MAX_UPDATES_PER_HOUR 5 MAX_CONNECTIONS_PER_HOUR 10;  
2  
3 GRANT ALL PRIVILEGES ON `muzej2020`.* TO 'administrator'@'%';
```

Drugi način kreiranja korisnika baze podataka je pomoću SQL komande za kreiranje okidača je pisanje i izvršavanje CREATE USER naredbe u editor upita. Preko SQL kartice, iz glavnog menija PHPMyAdmina, se pristupa editoru za pisanje upita.



Nakon ispisane SQL komande, bira se taster "Go". Prikazuje se poruka o vremenu izvršavanja komande, njena uspešnost, kao i SQL skript.



Dodela prava pristupa tabelama baze podataka se radi pomoću "Grant" SQL DCL komande. Primer prikazuje dodelu prava čitanja ("Select") podataka iz svih tabela baze pod nazivom "muzej2020", kao i dodelu prava izmene podataka u svim tabelama iste baze:

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. In the 'SQL' tab, two GRANT commands are entered:

```
1 GRANT SELECT ON muzej2020.* TO 'kustos'@'localhost';
2 GRANT UPDATE ON muzej2020.* TO 'kustos'@'localhost';
```

A red box highlights the SQL input area, and a blue arrow points from the text above to this box. A red circle highlights the 'Go' button at the bottom right of the SQL panel.

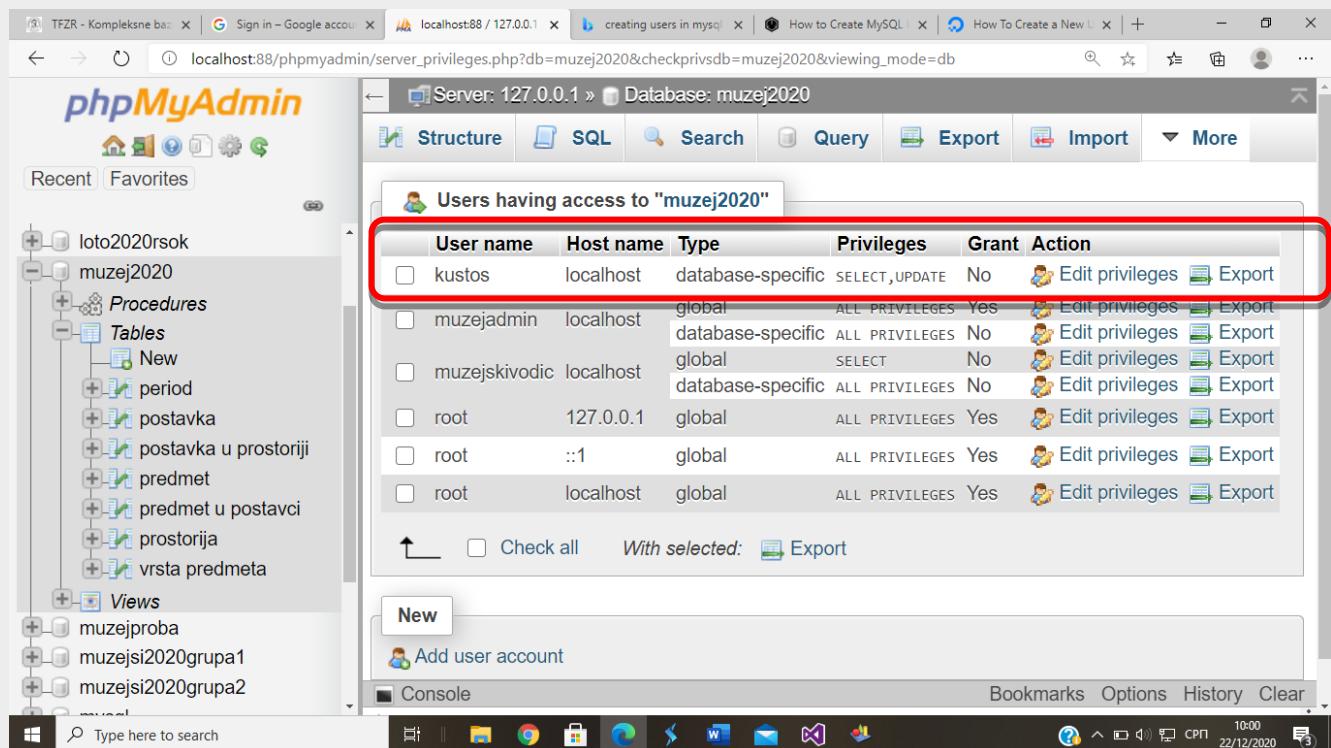
Prikaz SQL DCL komandi za dodelu prava brisanja podataka iz tačno određenih tabela navedene baze korisniku "kustos":

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. In the 'SQL' tab, four GRANT DELETE commands are entered:

```
1 GRANT DELETE ON muzej2020.postavka TO 'kustos'@'localhost';
2 GRANT DELETE ON muzej2020.prostorija TO 'kustos'@'localhost';
3 GRANT DELETE ON muzej2020.`predmet_u_postavci` TO 'kustos'@'localhost';
4 GRANT DELETE ON muzej2020.`postavka_u_prostoriji` TO 'kustos'@'localhost';
```

A red box highlights the SQL input area, and a blue arrow points from the text above to this box. A red circle highlights the 'Go' button at the bottom right of the SQL panel.

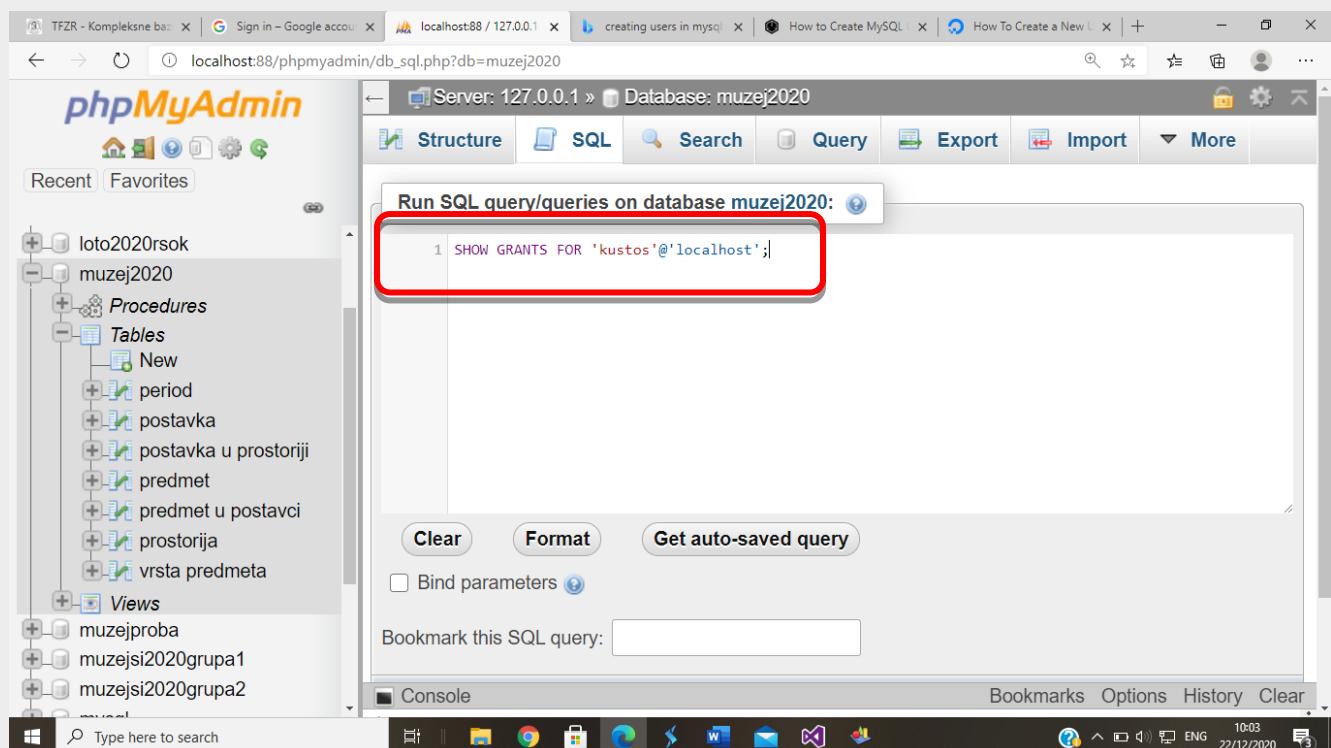
Izgled tabele sa spiskom korisnika i prikazom prava korisnika "kustos" koji je definisan nizom SQL naredbi kroz editor za pisanje upita:



The screenshot shows the phpMyAdmin interface for the 'muzej2020' database. The left sidebar lists various databases and tables. The main area displays a table titled 'Users having access to "muzej2020"'. The table has columns: User name, Host name, Type, Privileges, Grant, and Action. A red box highlights the row for the 'kustos' user, which has 'localhost' as the host and 'SELECT,UPDATE' as the privileges.

User name	Host name	Type	Privileges	Grant	Action
kustos	localhost	database-specific	SELECT,UPDATE	No	Edit privileges Export
muzejadmin	localhost	global	ALL PRIVILEGES	Yes	Edit privileges Export
mujejskivodic	localhost	global	SELECT	No	Edit privileges Export
root	127.0.0.1	global	ALL PRIVILEGES	Yes	Edit privileges Export
root	::1	global	ALL PRIVILEGES	Yes	Edit privileges Export
root	localhost	global	ALL PRIVILEGES	Yes	Edit privileges Export

Prikaz prava korisnika se izlistava SQL komandom "Show grants", koju, takođe, možemo napisati u editoru upita:



The screenshot shows the phpMyAdmin interface with the 'Query' tab selected. The left sidebar shows the database structure. The main area contains a SQL query editor with the following command highlighted with a red box:

```
1 SHOW GRANTS FOR 'kustos'@'localhost';
```

Nakon izvršavanja "Show grants" DCL komande sledi stranica sa prikazom liste prava korisnika:

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. In the left sidebar, under the 'Tables' section, there is a list of tables: 'New', 'period', 'postavka', 'postavka u prostoriji', 'predmet', 'predmet u postavci', 'prostorija', and 'vrsta predmeta'. The 'Query' tab is selected in the top menu. The SQL query window displays the output of the 'SHOW GRANTS FOR 'kustos'@'localhost'' command, which lists various grants including USAGE, SELECT, UPDATE, DELETE, and INSERT privileges on different tables and columns. A red box highlights this grant list.

Ukidanje prava pristupa tabelama baze podataka se radi pomoću "Revoke" SQL DCL komande. Primer prikazuje ukidanje prava brisanja podataka ("Delete") iz četiri navedene tabele baze podataka "muzej2020":

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. The left sidebar shows the same table list as the previous screenshot. The 'Query' tab is selected. The SQL query window contains four 'REVOKE DELETE' statements targeting the 'postavka', 'prostorija', 'predmet u postavci', and 'postavka u prostoriji' tables. These statements are highlighted with a red box. At the bottom right of the query window, the 'Go' button is also highlighted with a red box.

Prikaz stranice sa rezultatom uklanjanja prava korisnika SQL komandama:

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. The left sidebar lists tables such as 'postavka', 'postavka u prostoriji', 'predmet', etc. The main area displays four successful MySQL queries, each with a green checkmark:

- REVOKE DELETE ON muzej2020.postavka FROM 'kustos'@'localhost'
- REVOKE DELETE ON muzej2020.prostorija FROM 'kustos'@'localhost'
- REVOKE DELETE ON muzej2020.`predmet u postavci` FROM 'kustos'@'localhost'
- REVOKE DELETE ON muzej2020.vrsta predmeta FROM 'kustos'@'localhost'

Below the queries is a 'Console' tab and a system tray at the bottom.

Brisanje korisnika iz baze podataka, kao i iz samog servera se vrši pomoću "Drop user" SQL DCL komande. Primer prikazuje brisanje korisnika "kustos":

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. The left sidebar lists tables. The main area has a red box around the 'SQL' tab. In the SQL query box, the command 'DROP USER 'kustos'@'localhost';' is entered. The 'Go' button at the bottom right is also highlighted with a red box.

Nakon ispisane SQL komande za brisanje korisnika, kao što je već više puta navedeno u ovim tutorijalima, bira se taster "Go". Prikazuje se poruka o vremenu izvršavanja komande, njena uspešnost, kao i sam SQL skript.

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. The left sidebar lists tables such as 'New', 'period', 'postavka', 'postavka u prostoriji', 'predmet', 'predmet u postavci', 'prostorija', and 'vrsta predmeta'. The main area shows the results of a query:

```
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0016 seconds.)
```

```
DROP USER 'kustos'@'localhost'
```

Below the results are buttons for '[Edit inline]', '[Edit]', and '[Create PHP code]'. A red box highlights the message and the query itself.

Lista korisnika sa njihovim pravima, naravno, bez obrisanog korisnika:

The screenshot shows the phpMyAdmin interface for the database 'muzej2020'. The left sidebar lists tables. The main area displays a table titled 'Users having access to "muzej2020"':

User name	Host name	Type	Privileges	Grant	Action
muzejadmin	localhost	global	ALL PRIVILEGES	Yes	Edit privileges Export
muzejskivodic	localhost	database-specific	ALL PRIVILEGES	No	Edit privileges Export
root	127.0.0.1	global	ALL PRIVILEGES	Yes	Edit privileges Export
root	::1	global	ALL PRIVILEGES	Yes	Edit privileges Export
root	localhost	global	ALL PRIVILEGES	Yes	Edit privileges Export

A red box highlights the entire table. Below the table, there are buttons for 'Check all', 'With selected:', and '[Export]'. A new user addition form is visible at the bottom.