



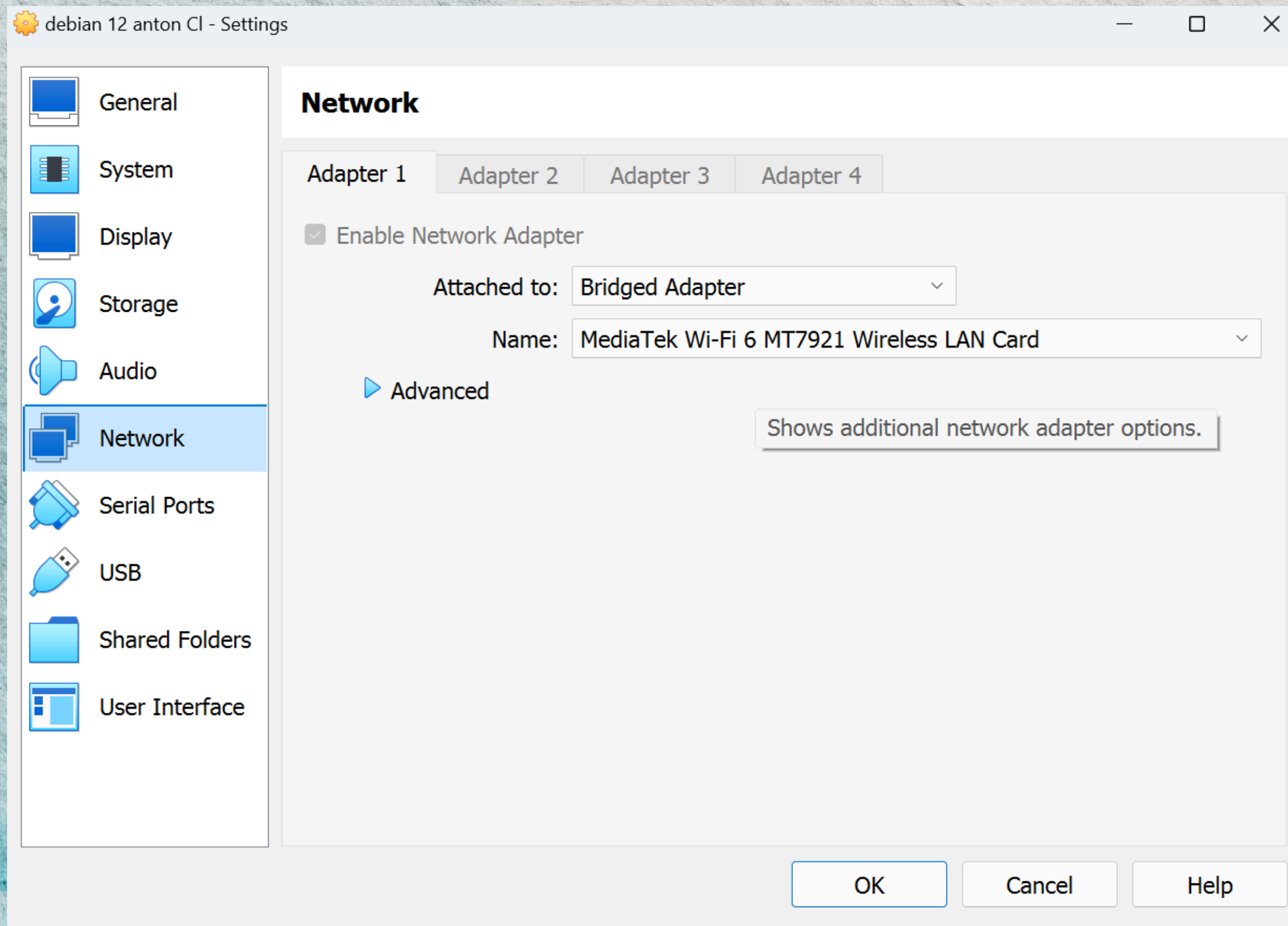
konfigurasi web & database server

By Jonathan Antonio




```
vboxuser@debian12: ~  
vboxuser@debian12:~$ su  
Password:  
root@debian12:/home/vboxuser# sudo apt install apache2  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  apache2-bin apache2-data apache2-utils  
Suggested packages:  
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom  
The following NEW packages will be installed:  
  apache2 apache2-data apache2-utils  
The following packages will be upgraded:  
  apache2-bin  
1 upgraded, 3 newly installed, 0 to remove and 18 not upgraded.  
Need to get 1,979 kB of archives.  
After this operation, 1,905 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y
```

1. login terlebih dahulu. kemudian install aplikasi apache2 dengan memasukkan perintah sudo apt install apache2



2. ubah networknya menjadi bridge adapter


```
root@debian12:/home/vboxuser# apt-get update
```

```
root@debian12:/home/vboxuser# apt-get upgrade
```

3. lakukan update & upgrade pada debian 12 kalian, dengan memasukkan perintah apt-get update & apt-get upgrade


```
root@debian12:/home/vboxuser# sudo apt install mariadb-server mariadb-client -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  galera-4 gawk libcgi-fast-perl libcgi-pm-perl libconfig-inifiles-perl
```

4. install aplikasi mariadb, dengan memasukkan perintah sudo apt install mariadb-server mariadb-client -y


```
root@debian12:/home/vboxuser# mysql_secure_installation
```

```
NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB  
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!
```

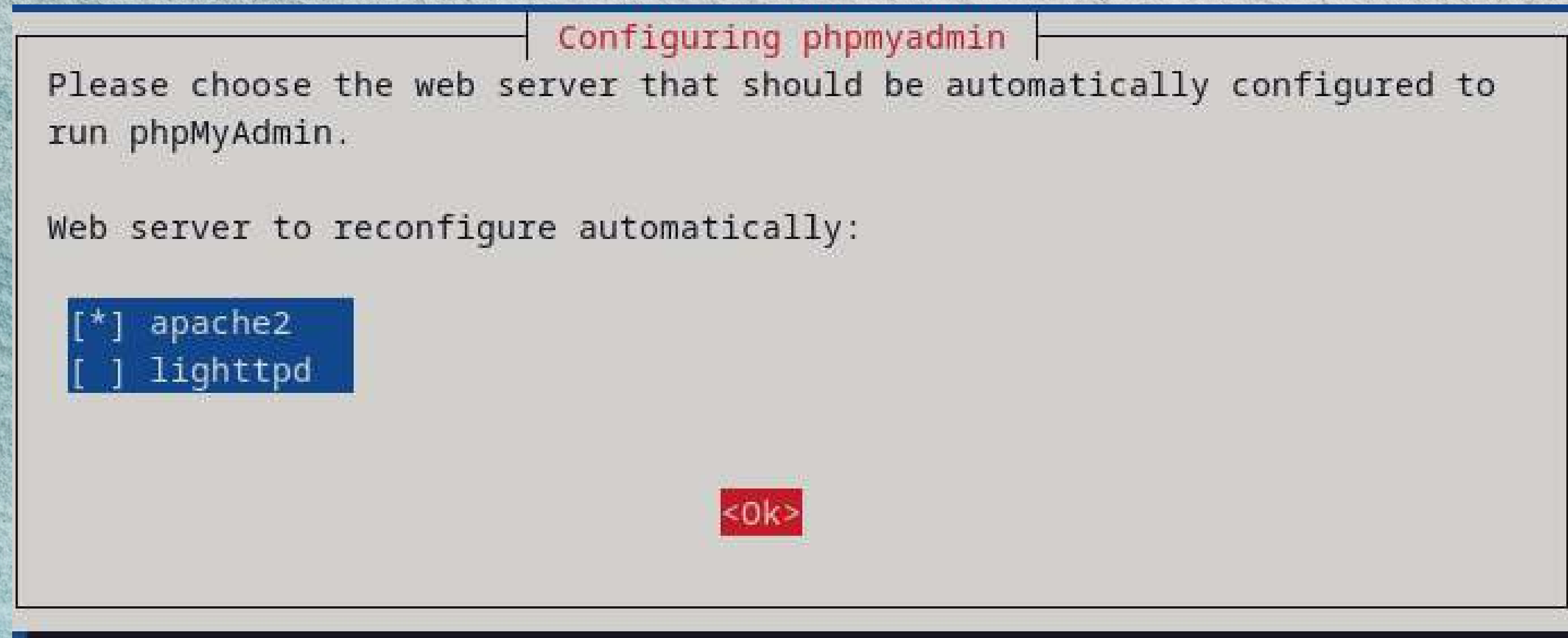
```
In order to log into MariaDB to secure it, we'll need the current  
password for the root user. If you've just installed MariaDB, and  
haven't set the root password yet, you should just press enter here.
```

```
Enter current password for root (enter for none): █
```

5. atur password instalasi mysql kalian, dengan cara memasukkan perintah `mysql_secure_installation`, lalu masukkan password, dan pilih Y untuk semua opsi yang ada


```
root@debian12:/home/vboxuser# apt install phpmyadmin php -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
phpmyadmin is already the newest version (4:5.2.1+dfsg-1).
php is already the newest version (2:8.2+93).
The following package was automatically installed and is no longer required
libdbus-qlib-1-2
```

**6. install aplikasi phpmyadmin dan php,
dengan memasukkan perintah apt install
phpmyadmin php -y, agar dapat membuka
database dengan tampilan gui**



7. setelah muncul tampilan seperti berikut berikan bintang pada bagian apache2, dengan menggunakan tombol spasi, kemudian tekan tombol tab, lalu enter

Configuring phpmyadmin

The phpmyadmin package must have a database installed and configured before it can be used. This can be optionally handled with dbconfig-common.

If you are an advanced database administrator and know that you want to perform this configuration manually, or if your database has already been installed and configured, you should refuse this option. Details on what needs to be done should most likely be provided in /usr/share/doc/phpmyadmin.

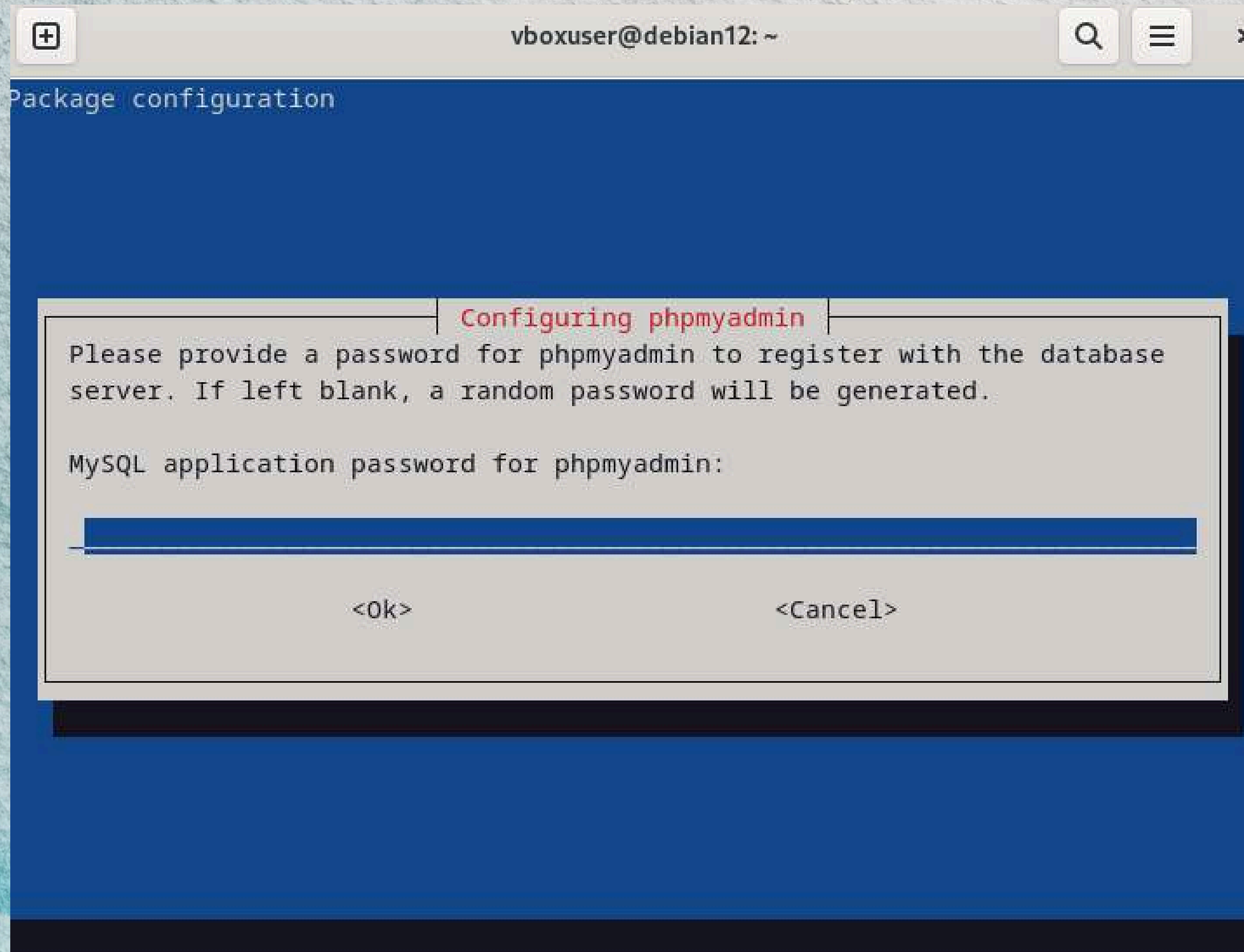
Otherwise, you should probably choose this option.

Configure database for phpmyadmin with dbconfig-common?

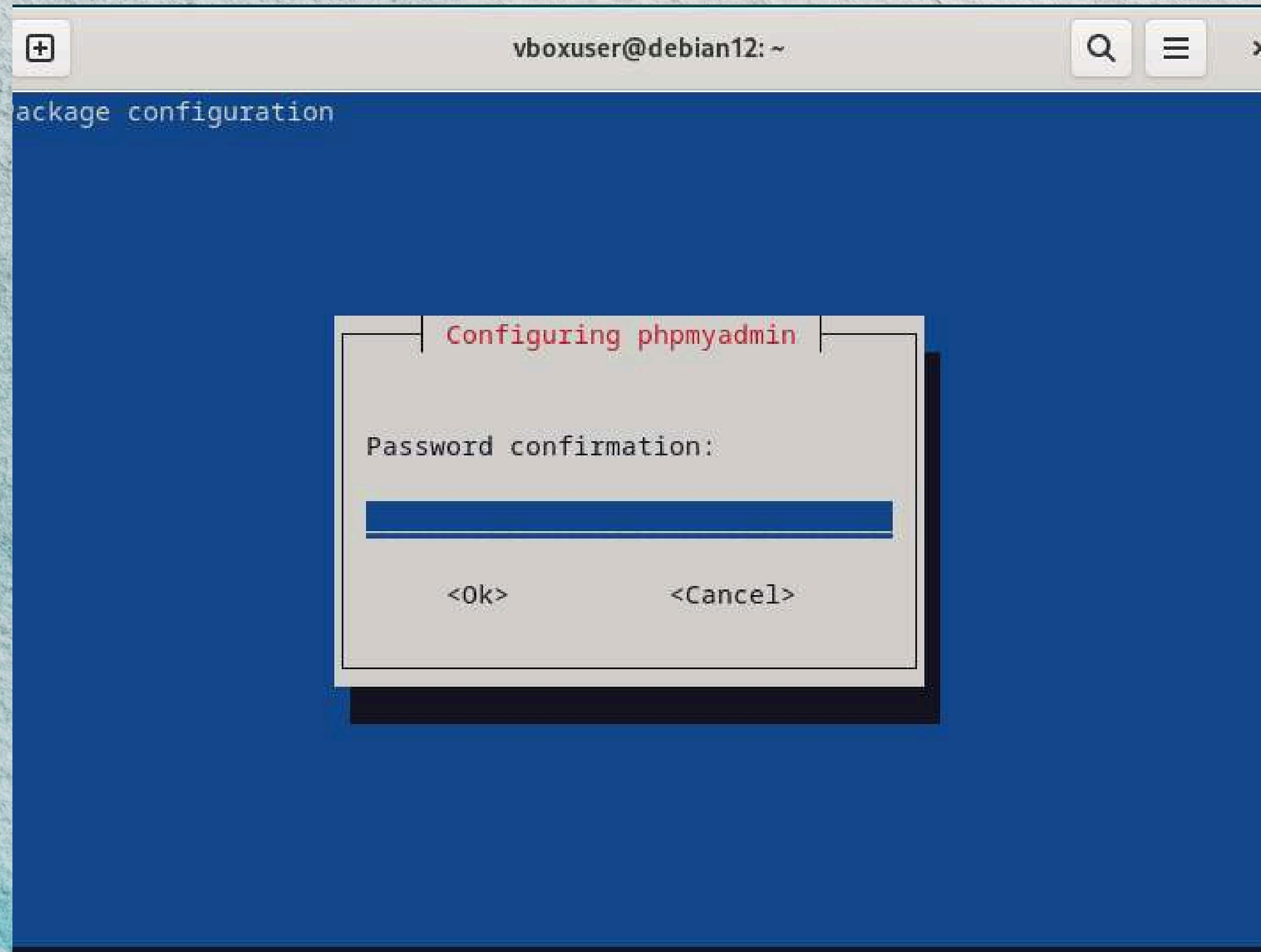
<Yes>

<No>

8. setelah muncul tampilan seperti berikut pilih "yes"




9. Masukkan password untuk phpmyadmin



10. Konfirmasi password yang sudah kalian masukkan sebelumnya


```
root@debian12:/home/vboxuser# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:26:0b:f9 brd ff:ff:ff:ff:ff:ff
    inet 192.168.43.124/24 brd 192.168.43.255 scope global dynamic noprefixroute enp0s3
        valid_lft 2187sec preferred_lft 2187sec
    inet6 fe80::a00:27ff:fe26:b9/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
root@debian12:/home/vboxuser#
```

11. Cek ip debian kalian,dengan perintah ip a



Welcome to phpMyAdmin

Language

English

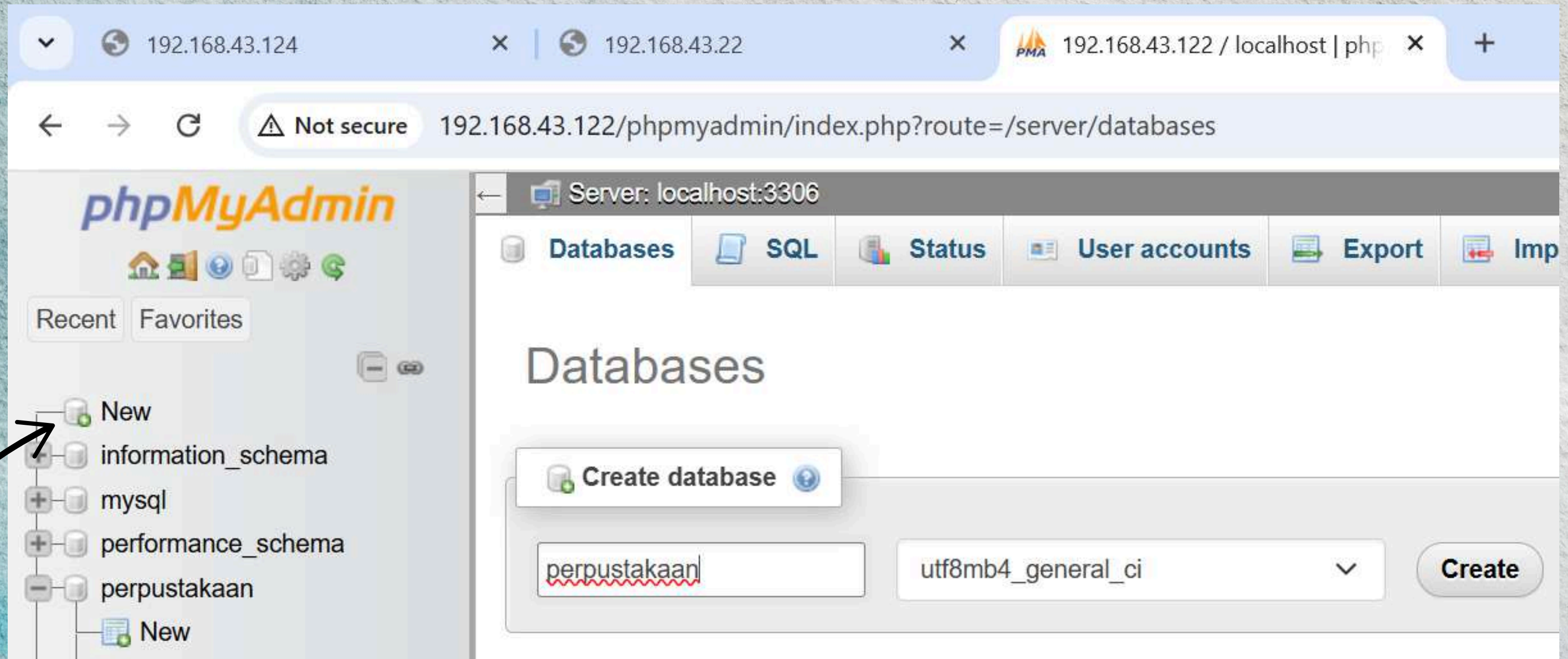
Log in

Username: root

Password:

Log in

**12. ketikkan ip debian kalian dengan format
“ip debian kalian/phpmyadmin” di
peramban/internet yang kalian miliki**



13. Klik “new” yang berada dibagian kiri, kemudian buat database baru dengan nama perpustakaan, jika sudah tekan “create”

Recent Favorites

New

+ information_schema

+ mysql

+ performance_schema

- perpustakaan

+ New

+ Tabel_Anggota

+ tabel_buku

+ tabel_pinjam

+ phpmyadmin

+ sys

Table name: Add column(s)

<input type="text" value="id_anggota"/>	INT	▼	<input type="text"/>	None	▼	<input type="text"/>
Pick from Central Columns						
<input type="text" value="nama"/>	TEXT	▼	<input type="text"/>	None	▼	<input type="text"/>
Pick from Central Columns						
<input type="text" value="kota"/>	TEXT	▼	<input type="text"/>	None	▼	<input type="text"/>
Pick from Central Columns						
<input type="text" value="alamat"/>	TEXT	▼	<input type="text"/>	None	▼	<input type="text"/>
Pick from Central Columns						
<input type="text" value="no_telp"/>	INT	▼	<input type="text"/>	None	▼	<input type="text"/>
Pick from Central Columns						
<input type="text" value="tanggal_lahir"/>	DATE	▼	<input type="text"/>	None	▼	<input type="text"/>
Pick from Central Columns						

Table name Number of columns

14. buat tabel baru dengan nama tabel_anggota, dengan 6 kolom, kemudian tekan "create" lalu isi setiap kolomnya sesuai gambar diatas

Recent Favorites

New

information_schema

mysql

performance_schema

perpustakaan

New

Tabel_Anggota

tabel_buku

tabel_pinjam

phpmyadmin

sys

Table name: Add column(s) Go

Name	Type	Length/Values	Default	Collation
<input type="text" value="no_pinjam"/> <small>Pick from Central Columns</small>	INT	<input type="text"/>	None	<input type="text"/>
<input type="text" value="id_anggota"/> <small>Pick from Central Columns</small>	INT	<input type="text"/>	None	<input type="text"/>
<input type="text" value="no_buku"/> <small>Pick from Central Columns</small>	INT	<input type="text"/>	None	<input type="text"/>
<input type="text" value="tanggal_pinjam"/> <small>Pick from Central Columns</small>	DATE	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="tanggal_kembali"/> <small>Pick from Central Columns</small>	DATE	<input type="text"/>	<input type="text"/>	<input type="text"/>

Table comments:

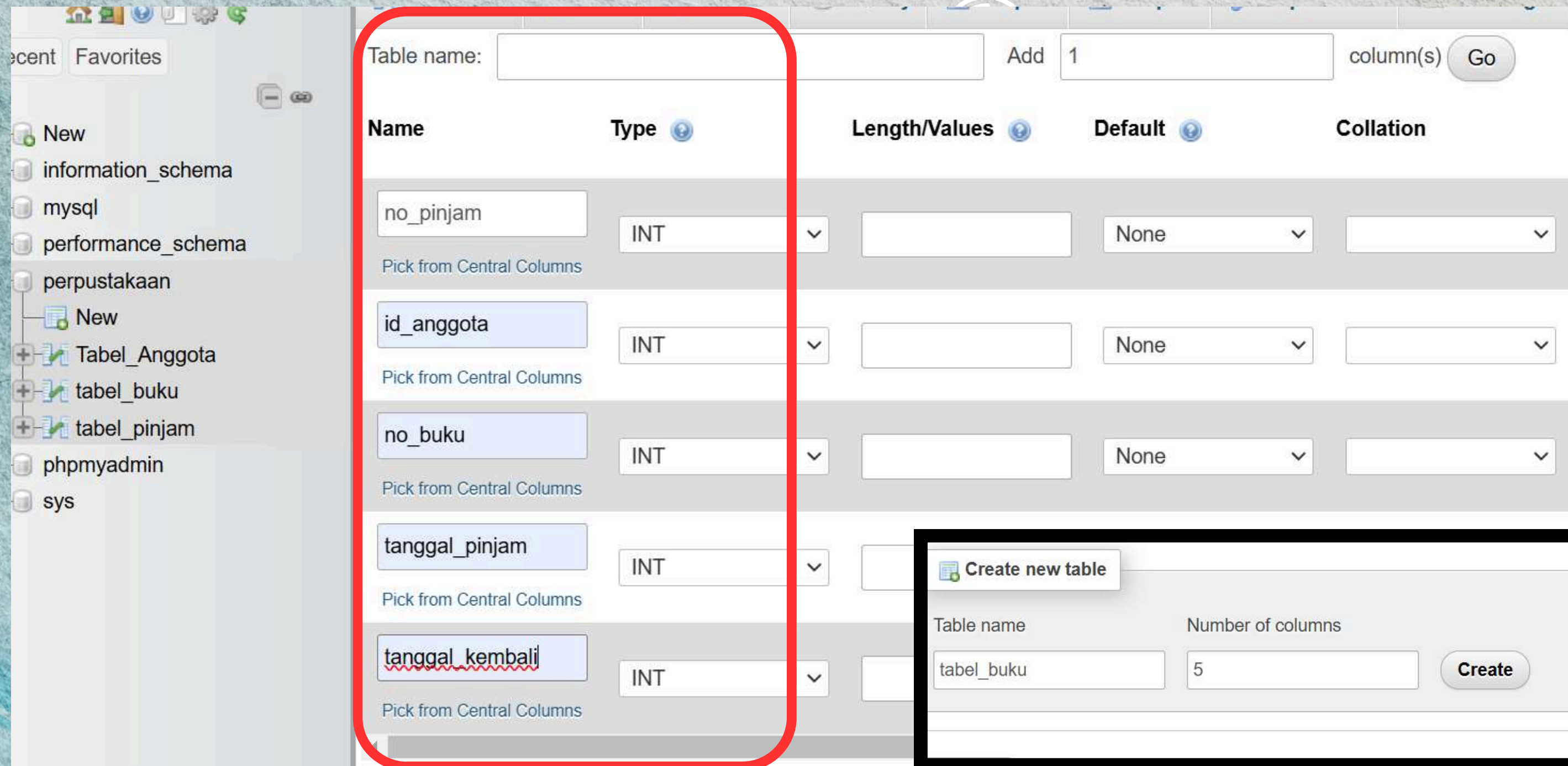
Create new table

Table name

Number of columns

Create

15. buat tabel baru dengan nama tabel_pinjam, dengan 5 kolom, kemudian tekan "create" lalu isi setiap kolomnya sesuai gambar diatas



16. buat tabel baru dengan nama tabel_buku, dengan 5 kolom, kemudian tekan "create" lalu isi setiap kolomnya sesuai gambar diatas

Recent Favorites

- New
- information_schema
- mysql
- performance_schema
- perpustakaan
 - New
 - Tabel_Anggota
 - tabel_buku
 - tabel_pinjam
- phpmyadmin
- sys

Browse Structure SQL Search Insert Export Import Privileges

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 Id_anggota	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 Nama	text	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	3 Kota	text	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	4 Alamat	text	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	5 No_Telp	int(11)			No	None			Change Drop More
<input type="checkbox"/>	6 tanggal_lahir	date			No	None			Change Drop More

☐ Check all With selected: Browse Change Drop Primary Unique Index

Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Normalize

Add 1 column(s) after tanggal_lahir Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	Id_anggota	0	A	No	

192.168.43.122/phpmyadmin/index.php?route=/table/structure&db=perpustakaan&table=Tabel_Anggota

17. jika sudah selesai membuat tabel, pilih tabel_anggota yang berada dibagian kiri, lalu pilih structure. Jika sudah, centang bagian id_anggota kemudian pilih "primary", yang ada di bagian bawah

Recent Favorites

- New
- information_schema
- mysql
- performance_schema
- perpustakaan
 - New
 - Tabel_Anggota
 - tabel_buku
 - tabel_pinjam
- phpmyadmin
- sys

Database: perpustakaan Table: tabel_pinjam

Browse Structure SQL Search Insert Export Import Privileges

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 no_pinjam	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 id_anggota	int(11)			No	None			Change Drop More
<input type="checkbox"/>	3 no_buku	int(11)			No	None			Change Drop More
<input type="checkbox"/>	4 tanggal_pinjam	date			No	None			Change Drop More
<input type="checkbox"/>	5 tanggal_kembali	date			No	None			Change Drop More

☐ Check all With selected: Browse Change Drop Primary Unique

Add to central columns Remove from central columns

Print Propose table structure ? Track table Move columns Normalize

Add 1 column(s) after tanggal_kembali

18. Selanjutnya untuk tabel pinjam, pilih tabel_pinjam yang berada dibagian kiri, lalu pilih structure. Jika sudah, centang bagian id_anggota kemudian pilih "primary", lalu centang lagi untuk no_buku kemudian pilih "unique"

phpMyAdmin

Server: localhost:3306 » Database: perpustakaan » Table: tabel_buku

Browse Structure SQL Search Insert Export Import Privileges

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 no_pinjam	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 id_anggota	int(11)			No	None			Change Drop More
<input type="checkbox"/>	3 no_buku	int(11)			No	None			Change Drop More
<input type="checkbox"/>	4 tanggal_pinjam	date			No	None			Change Drop More
<input type="checkbox"/>	5 tanggal_kembali	date			No	None			Change Drop More

☐ Check all With selected: Browse Change Drop Primary Unique Ir

Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Normalize

Add 1 column(s) after tanggal_kembali

19. terakhir untuk tabel buku, pilih tabel_buku yang berada dibagian kiri, lalu pilih structure. Jika sudah, centang bagian no_buku kemudian pilih "unique", yang ada di bagian bawah

The screenshot displays the phpMyAdmin interface for a database named 'perpustakaan'. The left sidebar shows the database structure, with 'perpustakaan' expanded to show tables: 'Tabel_Anggota', 'tabel_buku', and 'tabel_pinjam'. A red arrow points to 'perpustakaan' in the sidebar. The top navigation bar includes tabs for 'Structure', 'SQL', 'Search', 'Query', 'Export', 'Import', 'Operations', and 'Privileges'. A 'More' dropdown menu is open, showing 'Tracking', 'Designer', and 'Central columns'. A black arrow points to the 'Create relationship' option in the 'Structure' tab's context menu. Below the context menu, the 'Tabel_Anggota' table structure is partially visible. To the right, the 'tabel_buku' and 'tabel_pinjam' table structures are shown, both with columns: 'no_pinjam' (int(11)), 'id_anggota' (int(11)), 'no_buku' (int(11)), 'tanggal_pinjam' (date), and 'tanggal_kembali' (date).

phpMyAdmin

Server: localhost:3306 » Database: perpustakaan

Structure SQL Search Query Export Import Operations Privileges

Recent Favorites

New

information_schema

mysql

performance_schema

perpustakaan

New

Tabel_Anggota

tabel_buku

tabel_pinjam

phpmyadmin

sys

Show/Hide tables list

View in fullscreen

Add tables from other databases

New page

Open page

Save page

Save page as

Delete pages

Create table

Create relationship

Choose column to display

Reload

Help

Angular links / Direct links

Snap to grid

Small/Big All

Toggle small/big

Toggle relationship lines

Export schema

Tracking More

Designer

Central columns

perpustakaan tabel_buku

no_pinjam : int(11)

id_anggota : int(11)

no_buku : int(11)

tanggal_pinjam : date

tanggal_kembali : date

perpustakaan tabel_pinjam

no_pinjam : int(11)

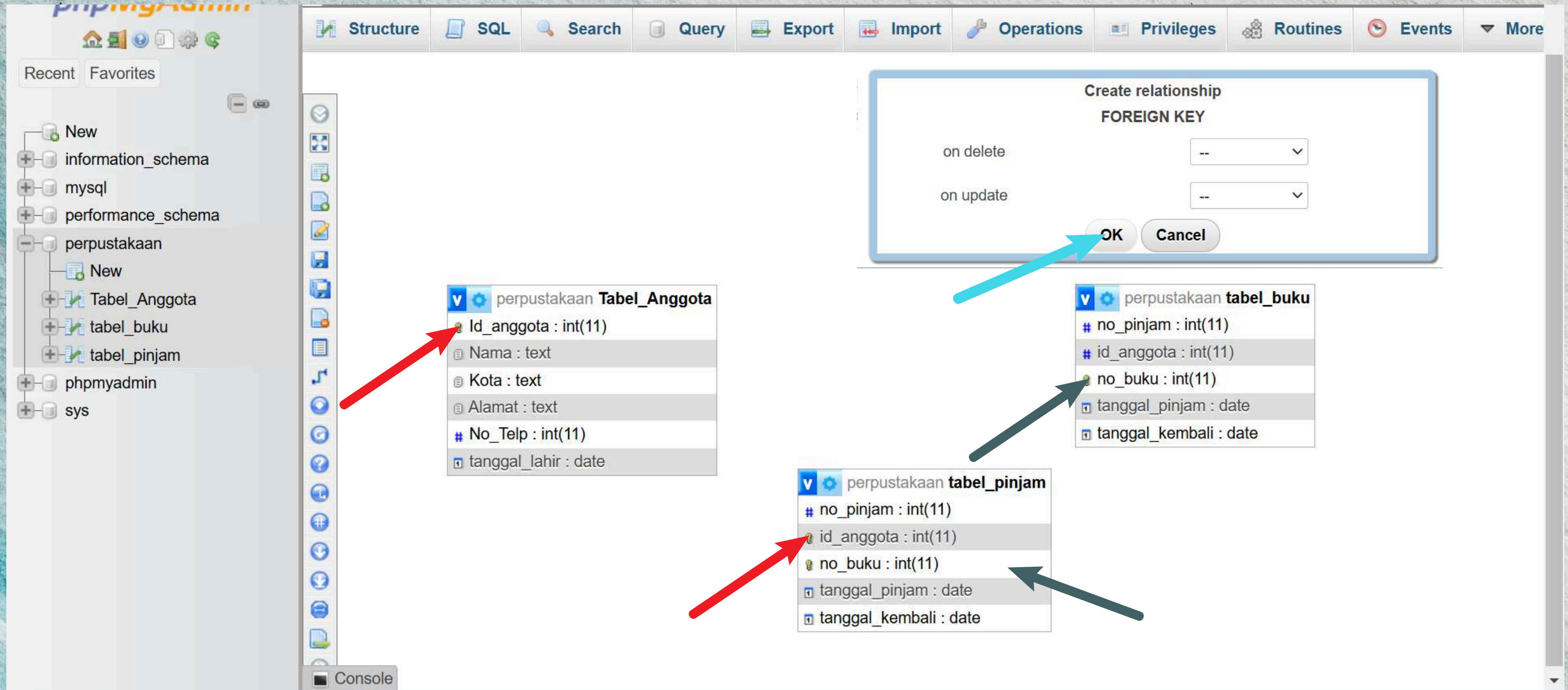
id_anggota : int(11)

no_buku : int(11)

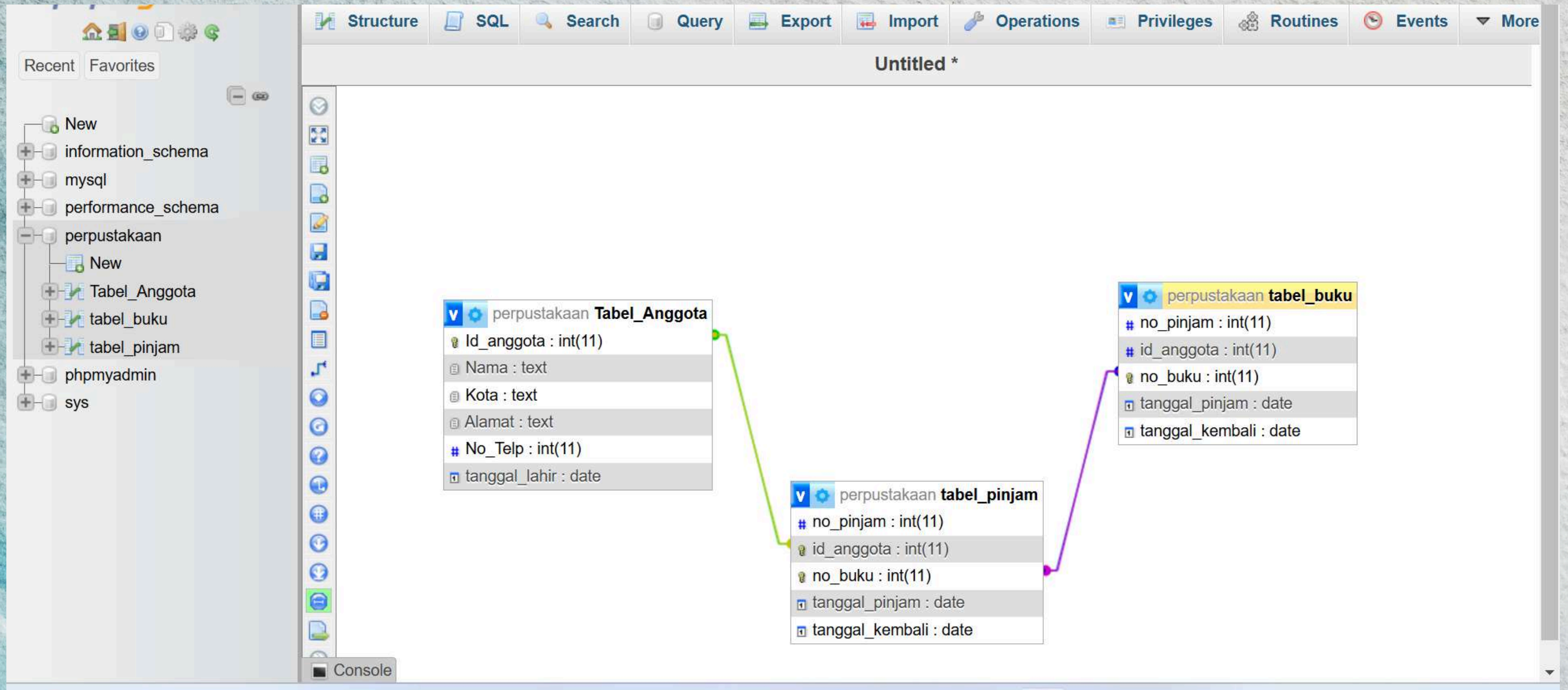
tanggal_pinjam : date

tanggal_kembali : date

20. Jika sudah, tekan perpustakaan, kemudian pilih more > designer, kemudian buka menunya, dan pilih "create relationship"



21. jika sudah memilih “create relationship”, pilih “id_anggota” di tabel_anggota, kemudian arahkan ke “id_anggota” di tabel_pinjam, jika muncul pop up “create relationship” tekan “ok”, lakukan hal yang sama dengan “no_buku” tabel_pinjam, dengan “no_buku” di tabel_buku



HASIL AKHIR



*Terima
Kasih*