

Creating Your Database on phpMyAdmin

If you decided to host your PHP pages on cslinux, then you can access cslinux phpMyAdmin through <https://cslinux.nottingham.edu.cn/phpmyadmin>. The username, password and database name of your phpMyAdmin account on cslinux are the same as your UNNC log-in ID, for example if your UNNC log-in ID is scy123:

Student SQL username: scy123

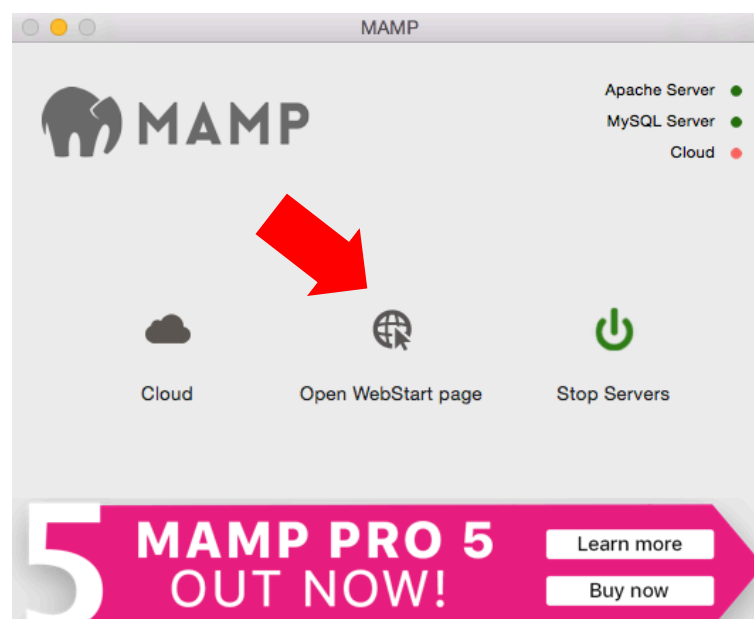
Student SQL password: scy123

Student SQL database: scy123

Note: Please remember they are all lower-case letters.

If you use other web server solution stacks, then please find your own way to their database configuration page to create a database by following their instructions. The rest of this document will be based on using phpMyAdmin to create your first database.

For MAMP, the link to their database configuration page is available from Open WebStart Page -> phpMyAdmin (towards the bottom half of their WebStart Page).



PHP

[phpinfo](#) shows the current configuration of PHP.

PHP-Caches

APC (not loaded)
eAccelerator (not loaded)
XCache (not loaded)
OPcache (not loaded)

phpMyAdmin

Configure your MySQL databases with [phpMyAdmin](#).

phpLiteAdmin

phpLiteAdmin needs PHP 5.2.4 to 7.0.x

MySQL

MySQL can be administered with [phpMyAdmin](#).

To connect to the MySQL server from your own scripts use the following connection parameters:

Host localhost
Port 8889
User root
Password root
Socket /Applications/MAMP/tmp/mysql/mysql.sock

Examples:

[PHP >= 5.6.x](#) [PHP <= 5.5.x](#) [Python](#) [Perl](#)

Connect via network:

```
$user = 'root';  
$password = 'root';
```

There is a new, nice font design
developers: JetBrains
Mono [jetbrains.com/mono/](#)

JetBrains Mono.
A typeface
for develop

JetBrains Mono: A free and open
Try JetBrains Mono in your IDE. Its
attention to every detail make codi
[jetbrains.com](#)

♡ +



MAMP
@mamp_en

PHP 7.4.1 is now available for M
Windows through in-app-update

Your phpMyAdmin homepage will look something like this.

The screenshot shows the phpMyAdmin interface. On the left is a sidebar with a tree view of databases: 'New', 'information_schema', 'mysql', 'performance_schema', and 'sys'. The main area is titled 'Server: localhost:8889' and has a top navigation bar with tabs: 'Databases', 'SQL', 'Status', 'User accounts', 'Export', 'Import', 'Settings', 'Replication', 'Variables', and 'More'. The 'Databases' tab is active, showing a 'Create database' form with 'utf8_general_ci' selected. Below this is a table listing databases:

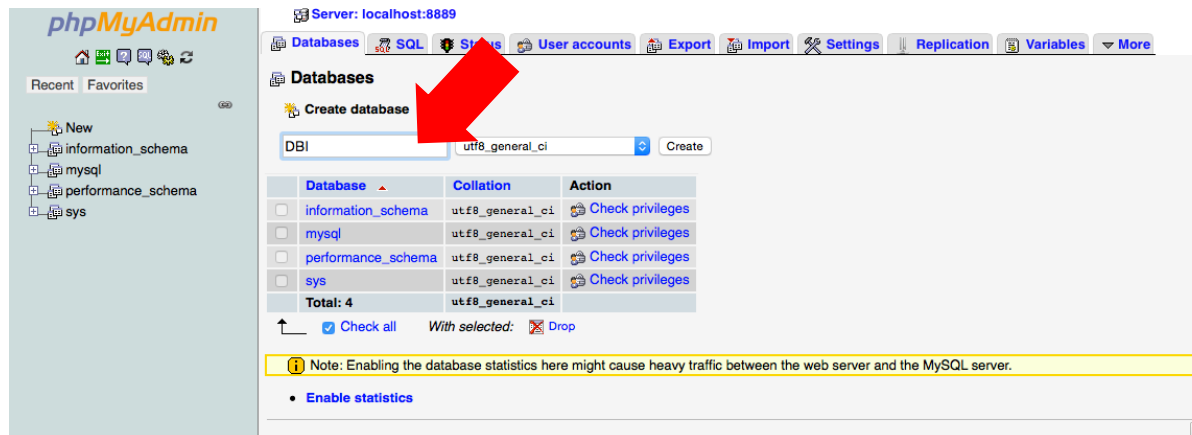
Database	Collation	Action
<input type="checkbox"/> information_schema	utf8_general_ci	Check privileges
<input type="checkbox"/> mysql	utf8_general_ci	Check privileges
<input type="checkbox"/> performance_schema	utf8_general_ci	Check privileges
<input type="checkbox"/> sys	utf8_general_ci	Check privileges
Total: 4	utf8_general_ci	

Below the table are links for 'Check all' and 'Drop'. A yellow note at the bottom states: 'Note: Enabling the database statistics here might cause heavy traffic between the web server and the MySQL server.' with a link to 'Enable statistics'.

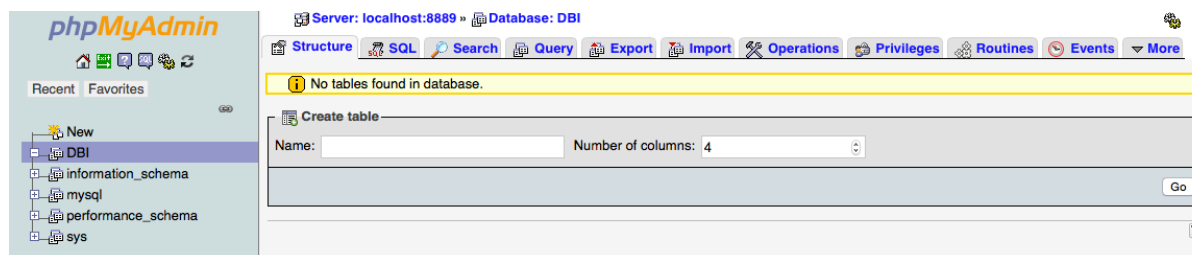
Creating a New Database

Please note that if you decided to host your PHP pages on cslinux, a database has already been created for you using your username (see page 1). You can skip this step but do note that the database name \$dbname in all of the given code examples on Moodle will have to be modified to your username.

If you chose to install a web server solution stack, type in the Name of your database. You can use whatever Name you want, but for the code examples given on Moodle to work without any modifications, please type in DBI and click Create.

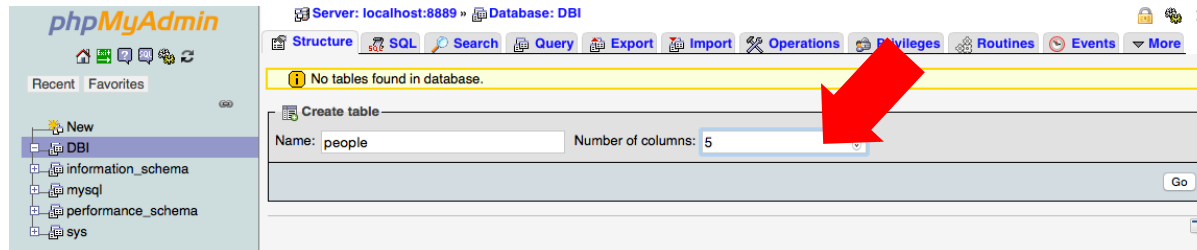


You will then receive an acknowledgement as shown below, telling you there are no tables in this database.

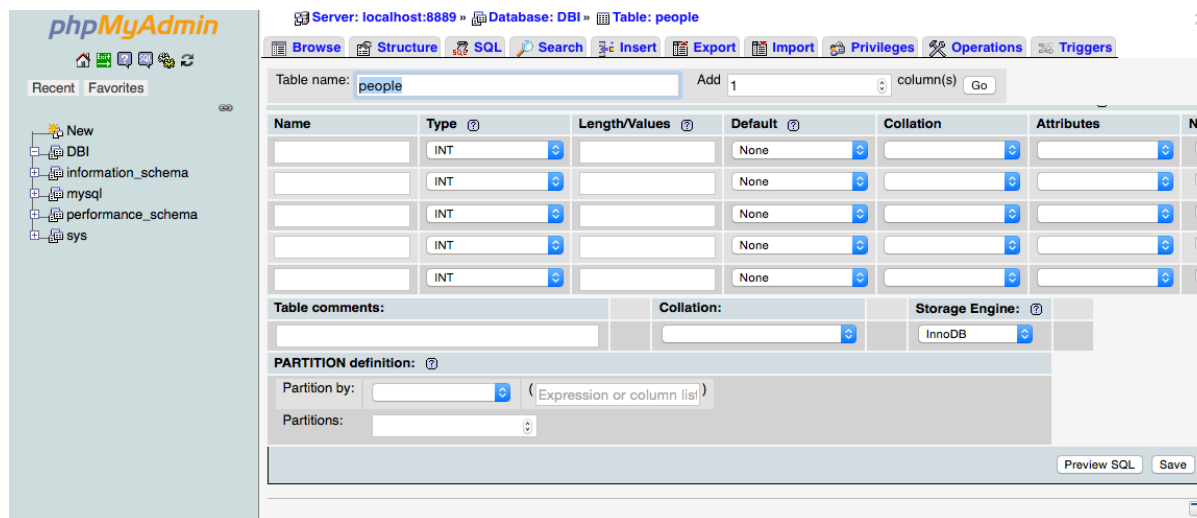


Creating a Table within a Database

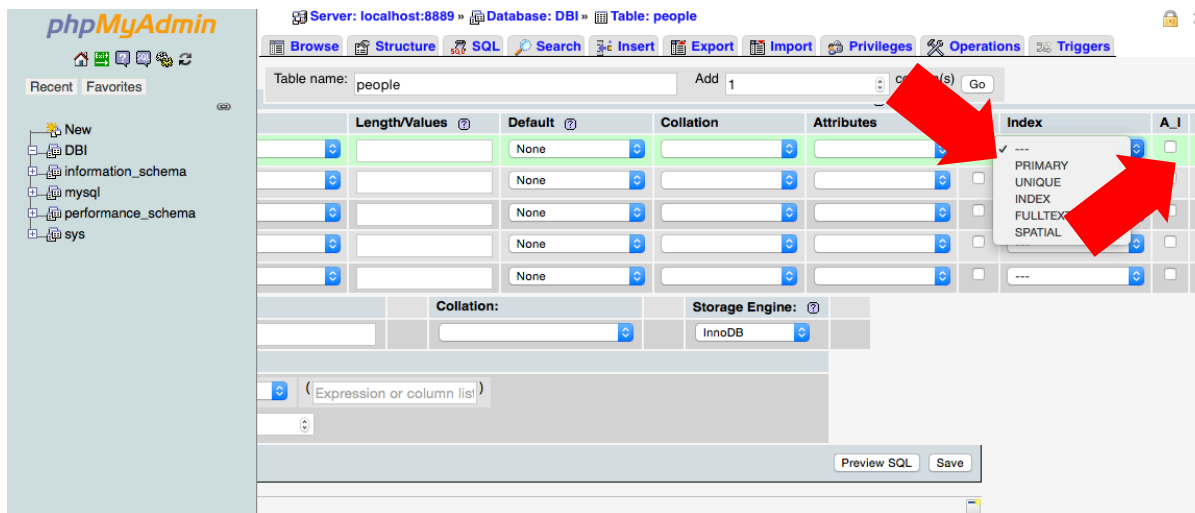
Type in the Name of the table, and the Number of columns for this table. For the given code examples on Moodle to work without any modifications, enter people as the Name of the table and 5 for the Number of columns and click Go.



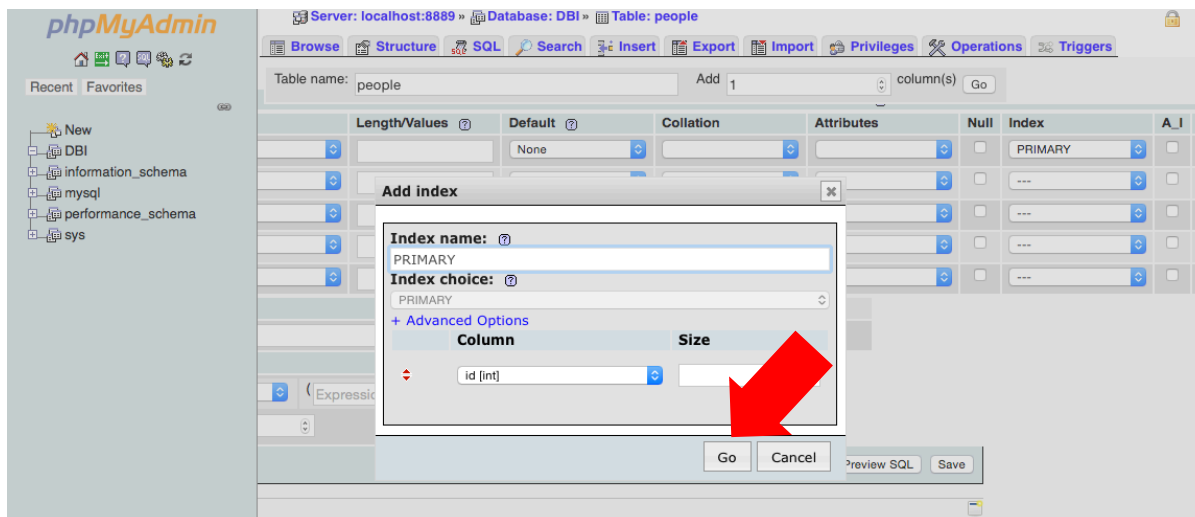
You will get to the next page, as shown below. This page allows you to specify each column information for each of the 5 columns you have created in the previous page.



In the first row, please enter id as the Name of the column. Scroll to the right of this page and select PRIMARY for the Index field as well as tick on the A_I checkbox as shown below. This will then popup a window (see the image after the next image).



Click Go on the popup window to accept.



For the other 4 columns, enter firstname, lastname, dob and telephone as the Names of the columns. Change the Type to TEXT, TEXT and DATE for firstname, lastname and dob respectively, and click Save.

phpMyAdmin

Server: localhost:8889 » Database: DBI » Table: people

Table name: people Add 1 column(s) Go

Name	Type	Length/Values	Default	Collation	Attributes
id	INT		None		
firstname	TEXT		None		
lastname	TEXT		None		
dob	DATE		None		
telephone	INT		None		

Table comments: Collation: Storage Engine: InnoDB

PARTITION definition: Partition by: (Expression or column list) Partitions:

Preview SQL Save

Once you clicked Save, your first table i.e. people, will have been created.

phpMyAdmin

Server: localhost:8889 » Database: DBI » Table: people

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None			Change Drop More
2	firstname	text	utf8_general_ci		No				Change Drop More
3	lastname	text	utf8_general_ci		No				Change Drop More
4	dob	date			No	None			Change Drop More
5	telephone	int(11)			No	None			Change Drop More

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

Print Propose table structure Move columns Normalize

Add 1 column(s) after telephone Go

Indexes

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

Create an index on 1 column(s) Go

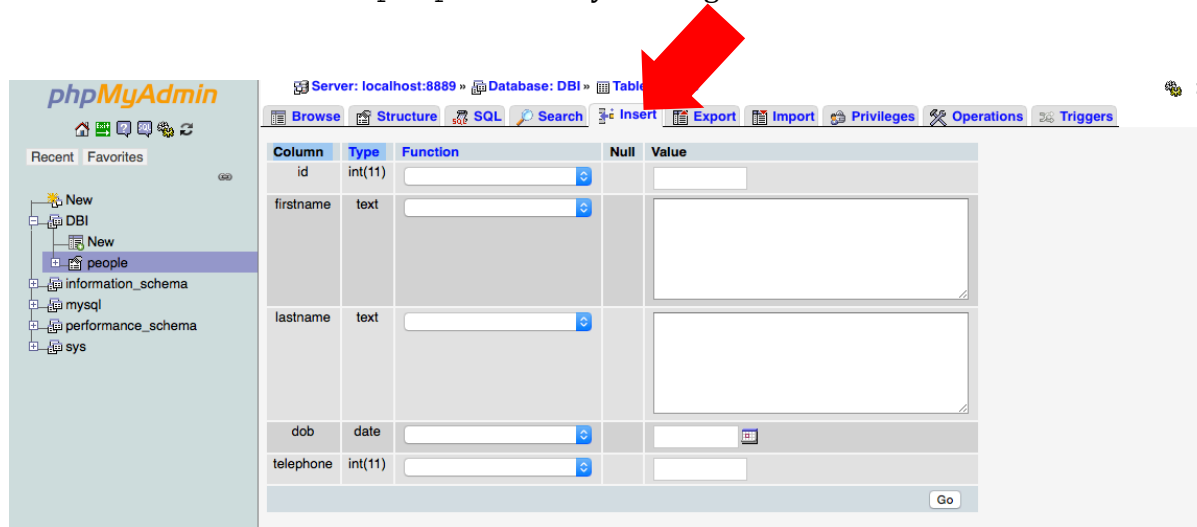
Partitions

No partitioning defined!

Partition table

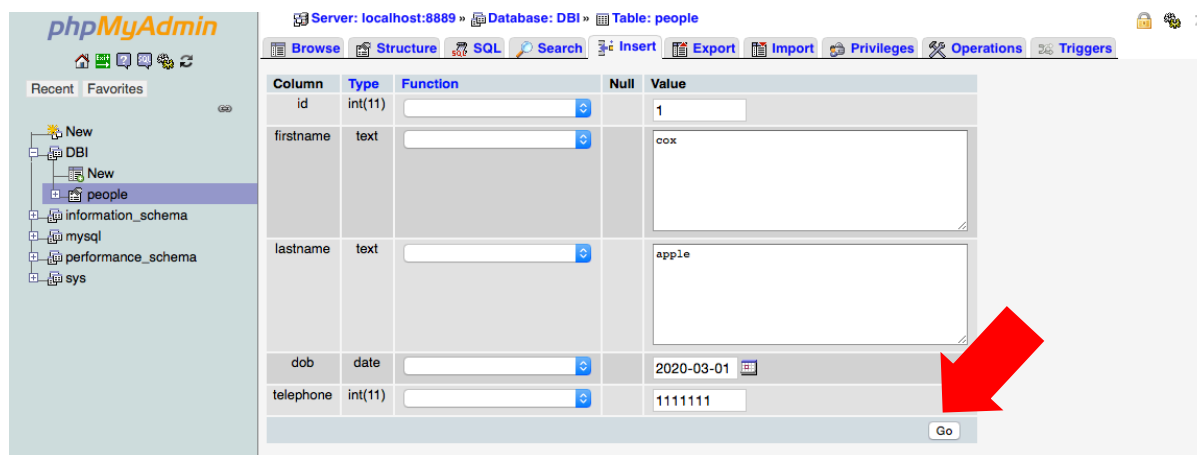
Entering Data into a Table

You can enter data into this people table by clicking on the Insert tab.



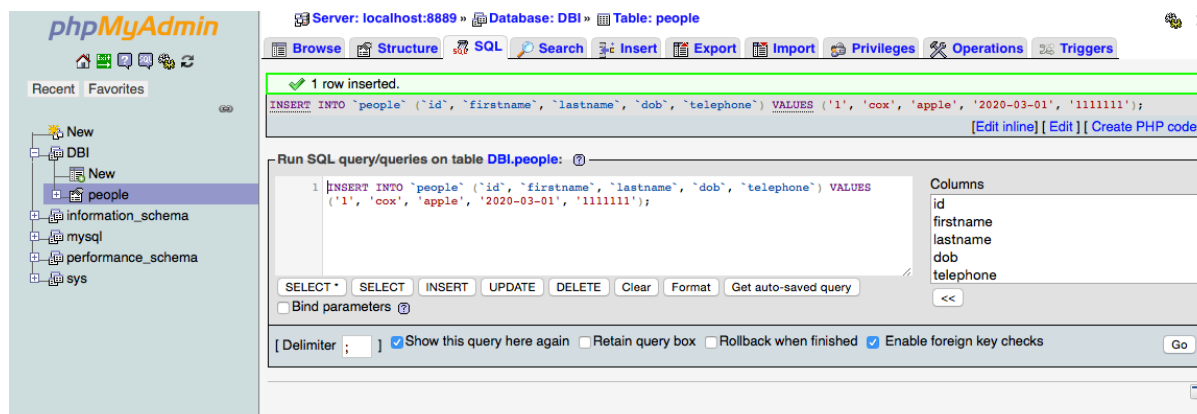
The screenshot shows the phpMyAdmin interface. On the left is a sidebar with a tree view containing 'New', 'DBI', 'New', 'people', 'information_schema', 'mysql', 'performance_schema', and 'sys'. The 'people' table is selected. The main panel shows the table structure for 'Table: people' with columns: id (int(11)), firstname (text), lastname (text), dob (date), and telephone (int(11)). The 'Insert' tab is selected, and a red arrow points to it. The 'Value' field for 'id' contains '1', 'firstname' contains 'cox', 'lastname' contains 'apple', 'dob' contains '2020-03-01', and 'telephone' contains '1111111'. A 'Go' button is at the bottom right.

Type in the data in the Value field and click Go. In this example, I typed in 1, cox, apple, 1st March 2020 and 1111111 as id, firstname, lastname, dob and telephone respectively.



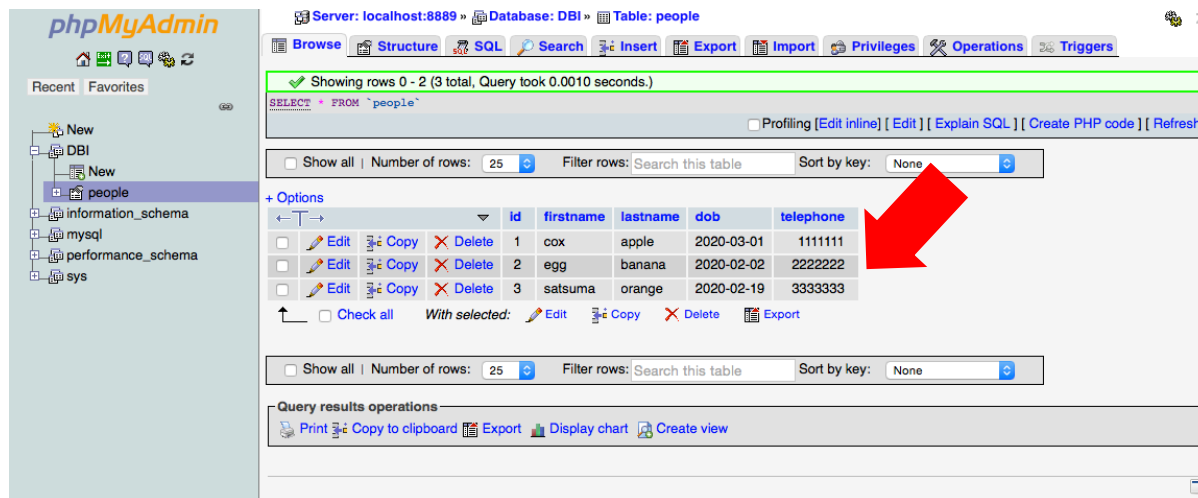
This screenshot is similar to the previous one, but the data is now entered in the 'Value' field: '1' for id, 'cox' for firstname, 'apple' for lastname, '2020-03-01' for dob, and '1111111' for telephone. A red arrow points to the 'Go' button at the bottom right.

You will then get a confirmation page as shown below.



The screenshot shows the confirmation page after inserting data. A green message bar at the top says '1 row inserted.' Below it, the SQL query is displayed: `INSERT INTO 'people' ('id', 'firstname', 'lastname', 'dob', 'telephone') VALUES ('1', 'cox', 'apple', '2020-03-01', '1111111');`. The 'Run SQL query/queries on table DBI.people:' section shows the same query. The 'Columns' list on the right includes id, firstname, lastname, dob, and telephone. At the bottom, there are checkboxes for 'Show this query here again', 'Retain query box', 'Rollback when finished', and 'Enable foreign key checks'. A 'Go' button is at the bottom right.

Click `Insert` tab again and repeat the data entering process a couple of times. Please make sure to enter different sets of data into each row for this `people` table. In this example, I have entered 3 rows of data into `people` table as shown below.



The screenshot shows the phpMyAdmin interface for a database named 'DBI'. The 'people' table is selected, and the 'Insert' tab is active. The table structure is as follows:

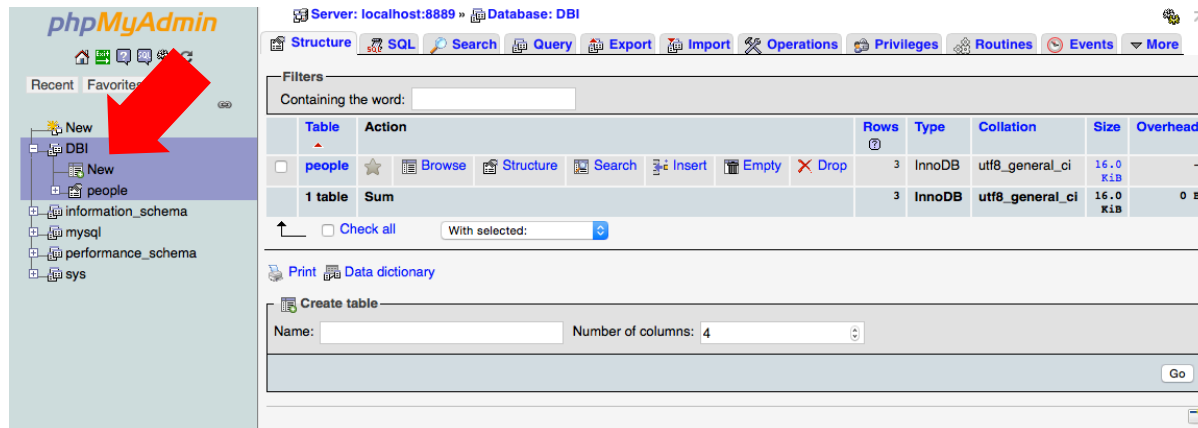
	id	firstname	lastname	dob	telephone
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	cox	apple	2020-03-01	1111111
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	egg	banana	2020-02-02	2222222
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	satsuma	orange	2020-02-19	3333333

A red arrow points to the 'telephone' column in the third row. The interface also shows a query bar with the SQL statement `SELECT * FROM `people`` and a 'Query results operations' section with links for Print, Copy to clipboard, Export, Display chart, and Create view.

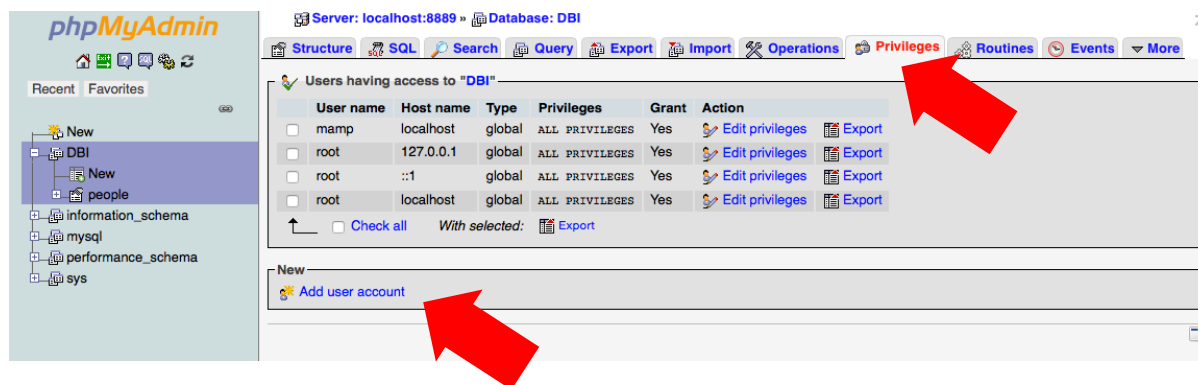
Adding a New User Account for a Database

Please note that if you decided to host your PHP pages on cslinux, a user account for your database has already been created for you using your username as both the database username and password (see page 1). You can skip this step but do note that the username `$username` and password `$password` in all of the given code examples on Moodle will have to be modified to your username.

If you chose to install a web server solution stack, click the Name of your database i.e. DBI on the menu on the left hand side.



Click on the Privileges tab. You will see a number of existing Privileges on your phpMyAdmin. Click on Add user account.



This will open a new page for you to enter Privileges settings for this new user account.

You can enter any User name, Host name, Password and Re-type that you want, but for the given code examples on Moodle to work without any modifications please enter username, localhost, password, and password in these fields respectively.

You can specify Privileges as shown below in the bottom half of this Privileges page. Once you have finished, click Go.

Global privileges [Check all](#)

Note: MySQL privilege names are expressed in English.

<input checked="" type="checkbox"/> Data <input checked="" type="checkbox"/> SELECT <input checked="" type="checkbox"/> INSERT <input checked="" type="checkbox"/> UPDATE <input checked="" type="checkbox"/> DELETE <input checked="" type="checkbox"/> FILE	<input checked="" type="checkbox"/> Structure <input checked="" type="checkbox"/> CREATE <input type="checkbox"/> ALTER <input type="checkbox"/> INDEX <input type="checkbox"/> DROP <input type="checkbox"/> CREATE TEMPORARY TABLES <input type="checkbox"/> SHOW VIEW <input type="checkbox"/> ALTER ROUTINE <input type="checkbox"/> EXECUTE <input type="checkbox"/> CREATE VIEW <input type="checkbox"/> EVENT <input type="checkbox"/> TRIGGER	<input type="checkbox"/> Administration <input type="checkbox"/> GRANT <input type="checkbox"/> SUPER <input type="checkbox"/> PROCESS <input type="checkbox"/> RELOAD <input type="checkbox"/> SHUTDOWN <input type="checkbox"/> SHOW DATABASES <input type="checkbox"/> LOCK TABLES <input type="checkbox"/> REFERENCES <input type="checkbox"/> REPLICATION CLIENT <input type="checkbox"/> REPLICATION SLAVE <input type="checkbox"/> CREATE USER	Resource limits <i>Note: Setting these options to 0 (zero) removes the limit.</i> MAX QUERIES PER HOUR <input type="text" value="0"/> MAX UPDATES PER HOUR <input type="text" value="0"/> MAX CONNECTIONS PER HOUR <input type="text" value="0"/> MAX USER_CONNECTIONS <input type="text" value="0"/>
---	---	---	---

SSL

☒ REQUIRE NONE
☐ REQUIRE SSL
☐ REQUIRE X509
☐ SPECIFIED

REQUIRE CIPHER
 REQUIRE ISSUER
 REQUIRE SUBJECT

[Go](#)

You will then receive a confirmation that a new user has been added successfully.

phpMyAdmin Server: localhost:8889

[Databases](#) [SQL](#) [Status](#) [User accounts](#) [Export](#) [Import](#) [Settings](#) [Replication](#) [Variables](#) [More](#)

✓ You have added a new user.

```
CREATE USER 'username'@'localhost' IDENTIFIED WITH mysql_native_password AS '***'; GRANT SELECT, INSERT, UPDATE, DELETE, CREATE, FILE ON *.* TO 'username'@'localhost' REQUIRE NONE WITH MAX_QUERIES_PER_HOUR 0 MAX_CONNECTIONS_PER_HOUR 0 MAX_UPDATES_PER_HOUR 0 MAX_USER_CONNECTIONS 0; GRANT ALL PRIVILEGES ON `DBI`.* TO 'username'@'localhost';
```

[\[Edit inline\]](#) [\[Edit\]](#) [\[Create PHP code\]](#)

Database Table Routine

Edit privileges: User account 'username'@'localhost' - Database DBI

Database-specific privileges [Check all](#)

Note: MySQL privilege names are expressed in English.

<input type="checkbox"/> Data <input type="checkbox"/> SELECT <input type="checkbox"/> INSERT <input type="checkbox"/> UPDATE <input type="checkbox"/> DELETE	<input type="checkbox"/> Structure <input type="checkbox"/> CREATE <input type="checkbox"/> ALTER <input type="checkbox"/> INDEX <input type="checkbox"/> DROP <input type="checkbox"/> CREATE TEMPORARY TABLES <input type="checkbox"/> SHOW VIEW <input type="checkbox"/> CREATE ROUTINE <input type="checkbox"/> ALTER ROUTINE <input type="checkbox"/> EXECUTE <input type="checkbox"/> CREATE VIEW <input type="checkbox"/> EVENT <input type="checkbox"/> TRIGGER	<input type="checkbox"/> Administration <input type="checkbox"/> GRANT <input type="checkbox"/> LOCK TABLES <input type="checkbox"/> REFERENCES
--	--	---

[Go](#)

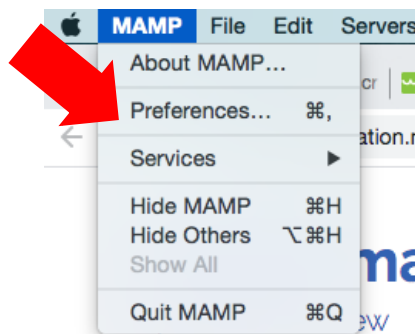
If you have completed every step above correctly, then the given first PHP code example which connects to DBI database should work perfectly.

Viewing your PHP-Database Output

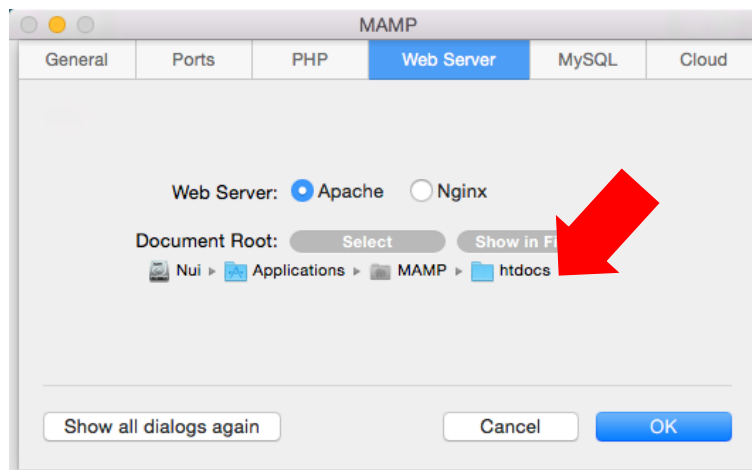
If you host your PHP pages on cslinux, then please enter `http://cslinux.nottingham.edu.cn/~xxxxxxx/` where `xxxxxxx` is your username. Please note that this must be done through VDI if you are not on campus and your PHP file should be in your `public_html` folder.

If you use other web server solution stacks, then please find your own way to view your PHP pages by following their instructions.

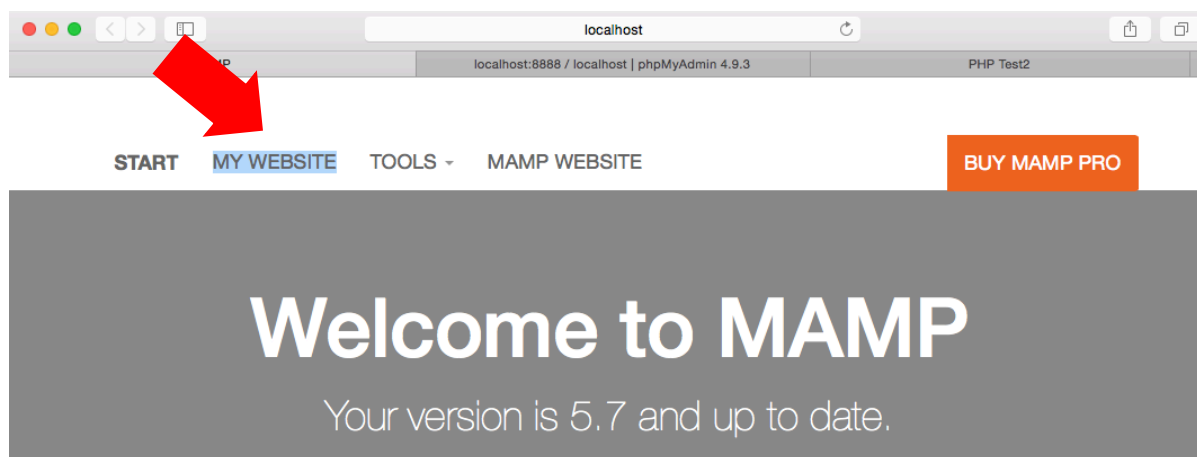
For MAMP, you need to find where you should store your PHP files by going to the MAMP menu on the top left, and select Preferences.



Go to the Web Server tab and note where your `htdocs` folder is. Your PHP files should go in there.



To process and view your PHP files, please make sure your server is running i.e. green light on both Servers and click Open WebStart Page -> MY WEBSITE (on the top of the next page as shown in the next image).



You should now see the message `Connected Successfully` when you run Example #1 in the given code examples. If you don't, then please revisit the above steps and make sure that everything is setup correctly.

