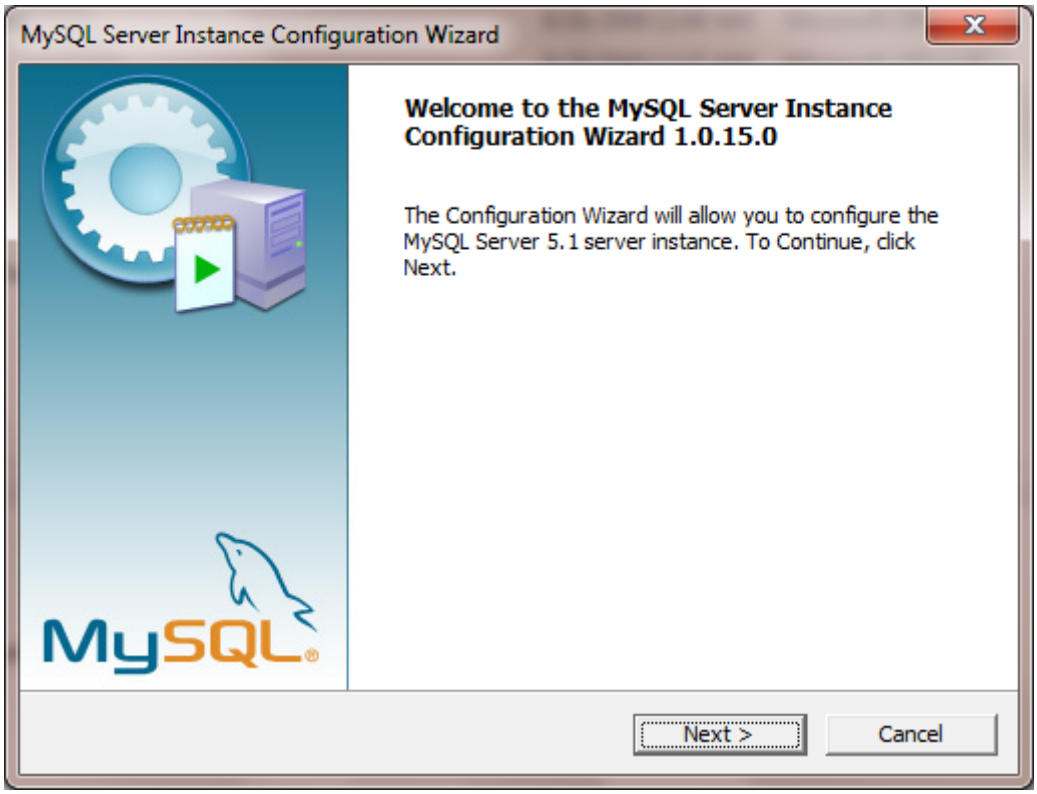
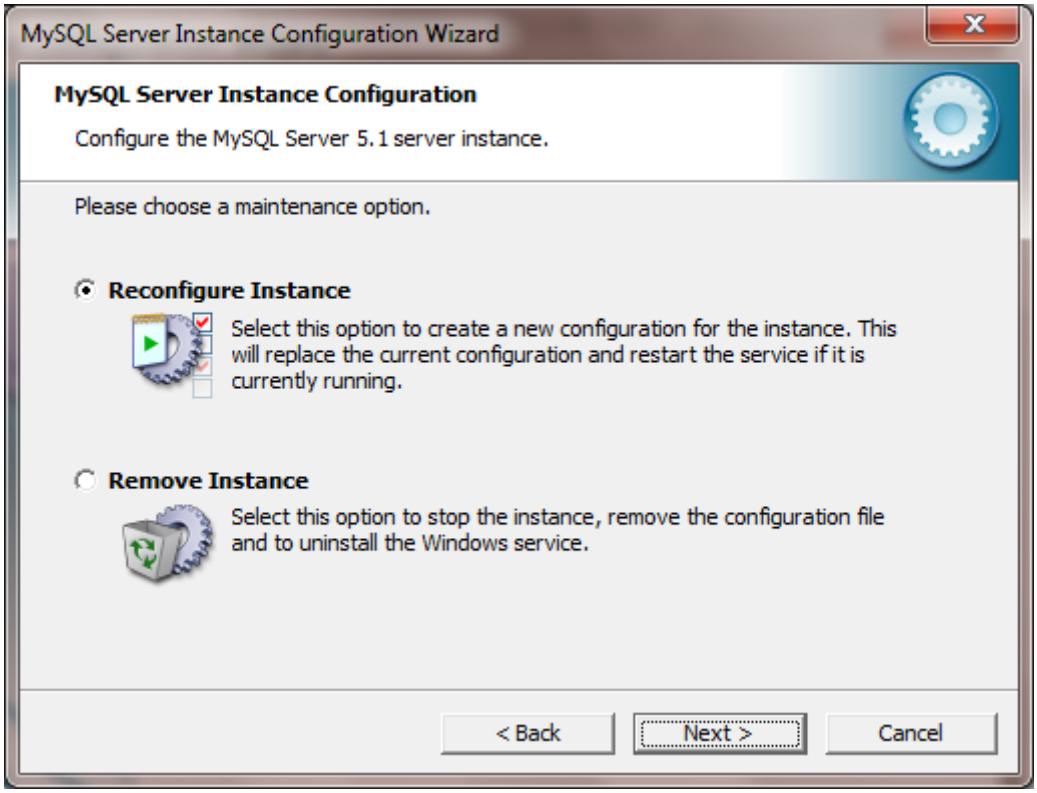
Lab 5-1: MySQL & PHP

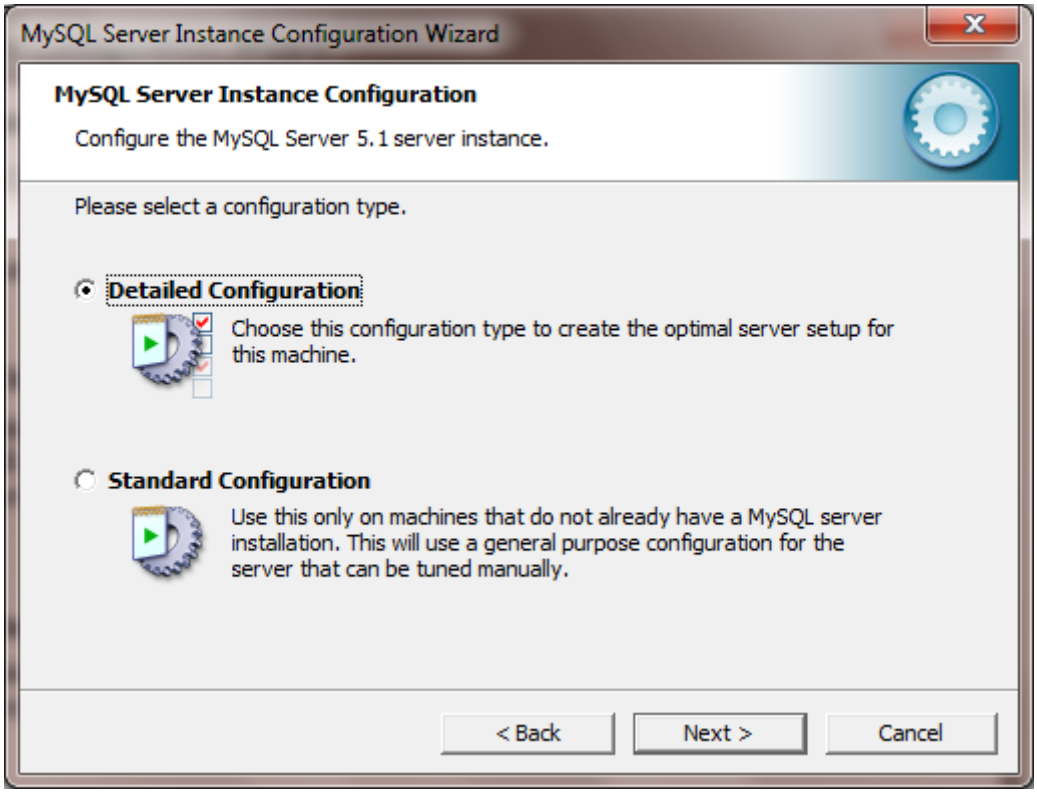
Prepared: TrangNTT

6.1. MySQL Server Instance

Select Start → All Programs → Zend Server Comminity Edition → MySQL






MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please select a configuration type.
Detailed Configuration
Choose this configuration type to create the optimal server setup for this machine.
Standard Configuration
Use this only on machines that do not already have a MySQL server installation. This will use a general purpose configuration for the server that can be tuned manually.
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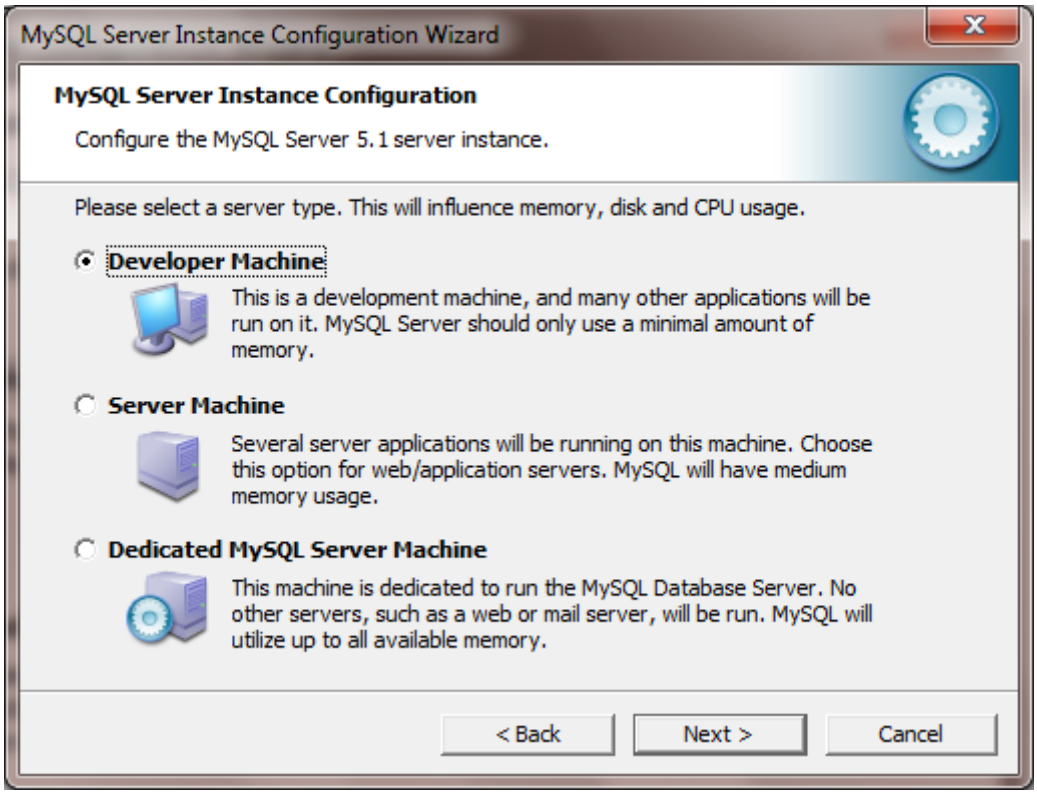
Cancel


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please select a server type. This will influence memory, disk and CPU usage.
Developer Machine
This is a development machine, and many other applications will be run on it. MySQL Server should only use a minimal amount of memory.
Server Machine
Several server applications will be running on this machine. Choose this option for web/application servers. MySQL will have medium memory usage.
Dedicated MySQL Server Machine
This machine is dedicated to run the MySQL Database Server. No other servers, such as a web or mail server, will be run. MySQL will utilize up to all available memory.
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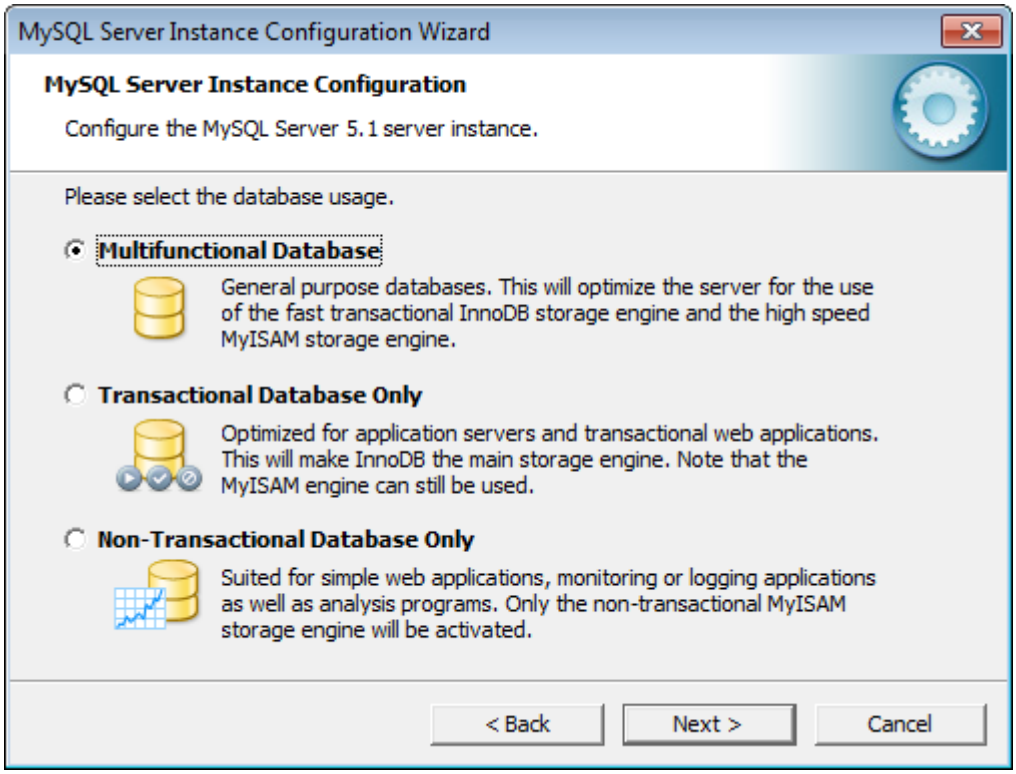
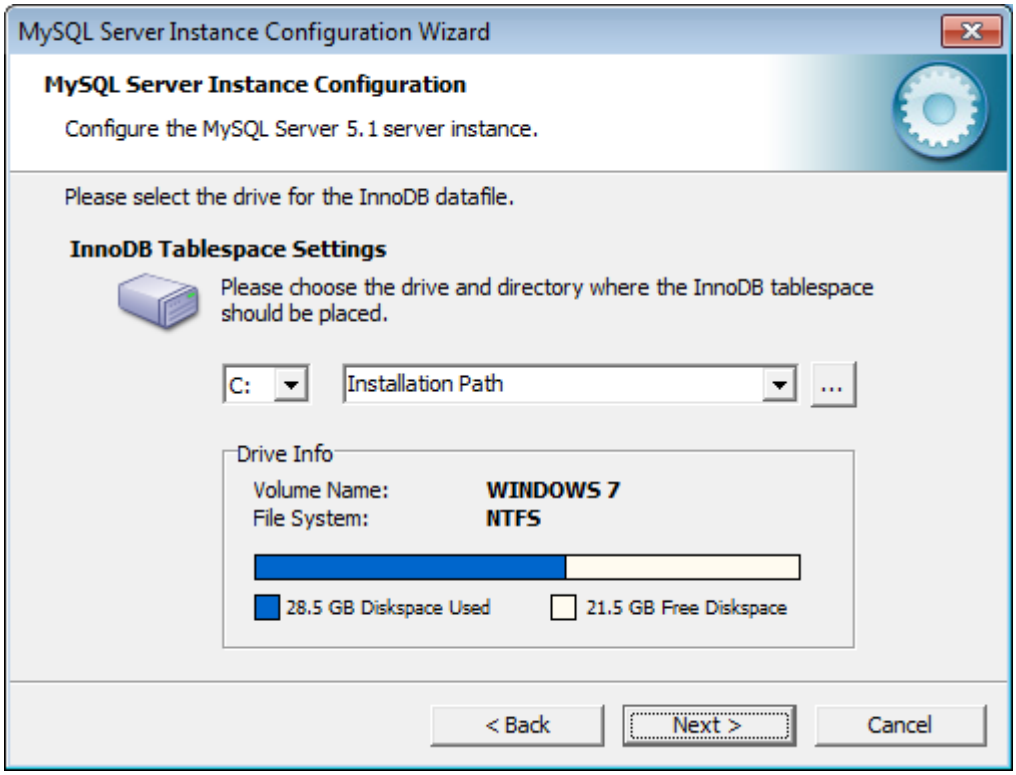
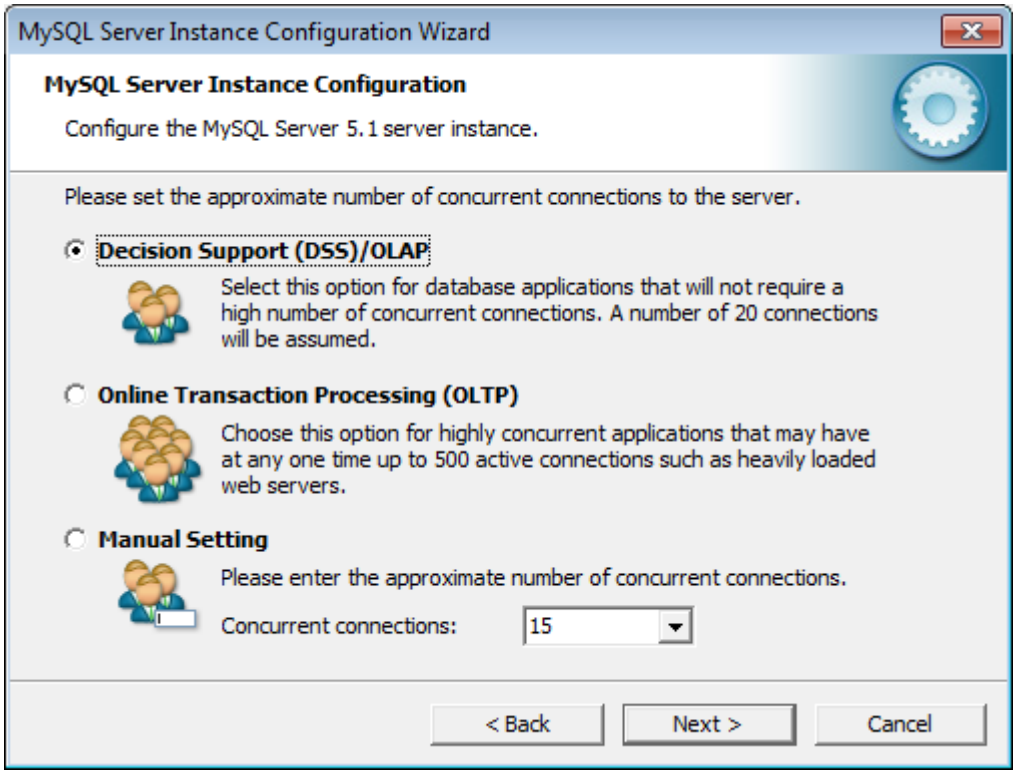


Press Modify button if you need to change the location of InnoDB tablespace.




MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please set the approximate number of concurrent connections to the server.
Decision Support (DSS)/OLAP
Select this option for database applications that will not require a high number of concurrent connections. A number of 20 connections will be assumed.
Online Transaction Processing (OLTP)
Choose this option for highly concurrent applications that may have at any one time up to 500 active connections such as heavily loaded web servers.
Manual Setting
Please enter the approximate number of concurrent connections.
Concurrent connections:
15
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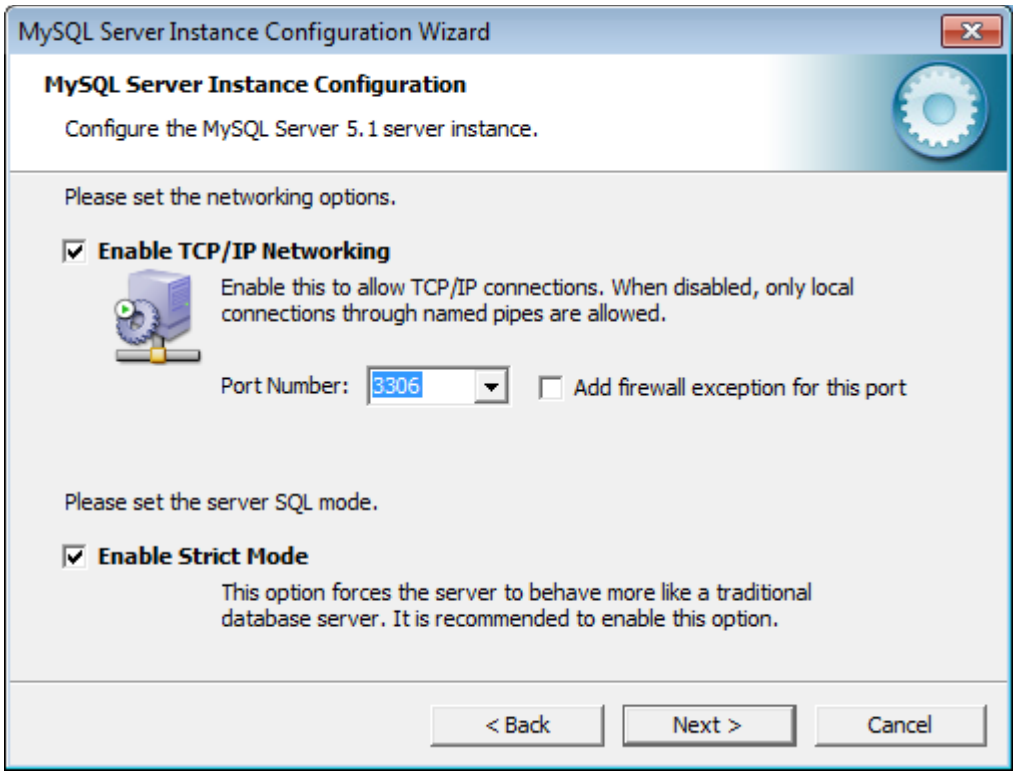
MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please set the networking options.
Enable TCP/IP Networking
Enable this to allow TCP/IP connections. When disabled, only local connections through named pipes are allowed.
Port Number:
3306
Add firewall exception for this port
Please set the server SQL mode.
Enable Strict Mode
This option forces the server to behave more like a traditional database server. It is recommended to enable this option.
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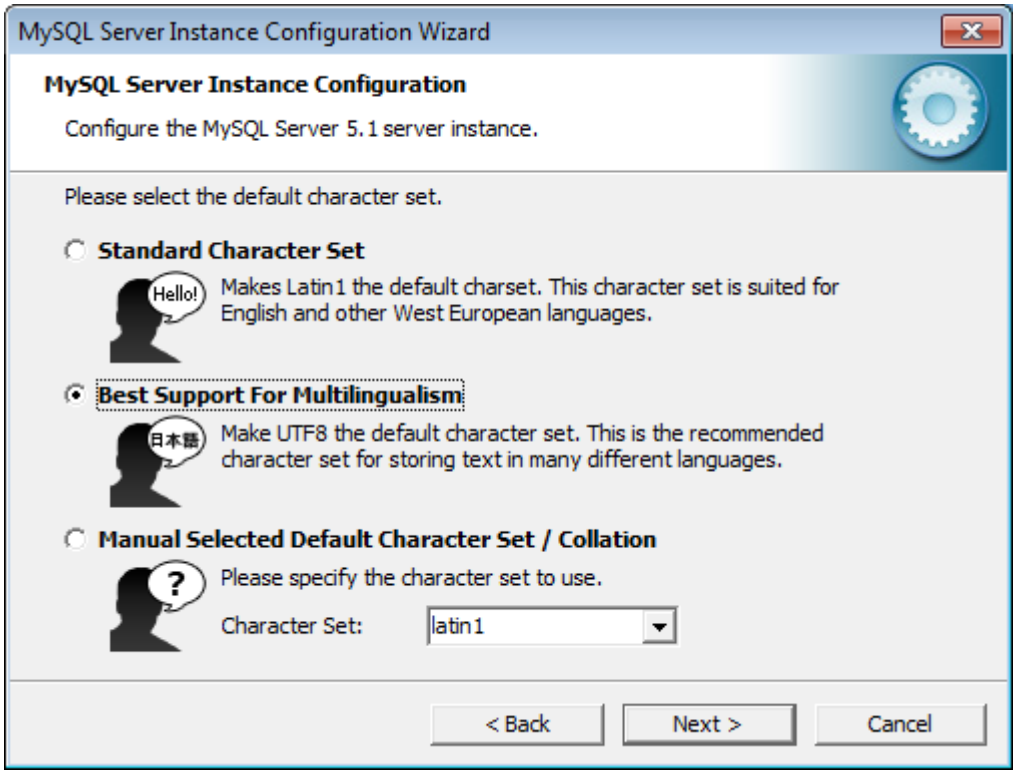
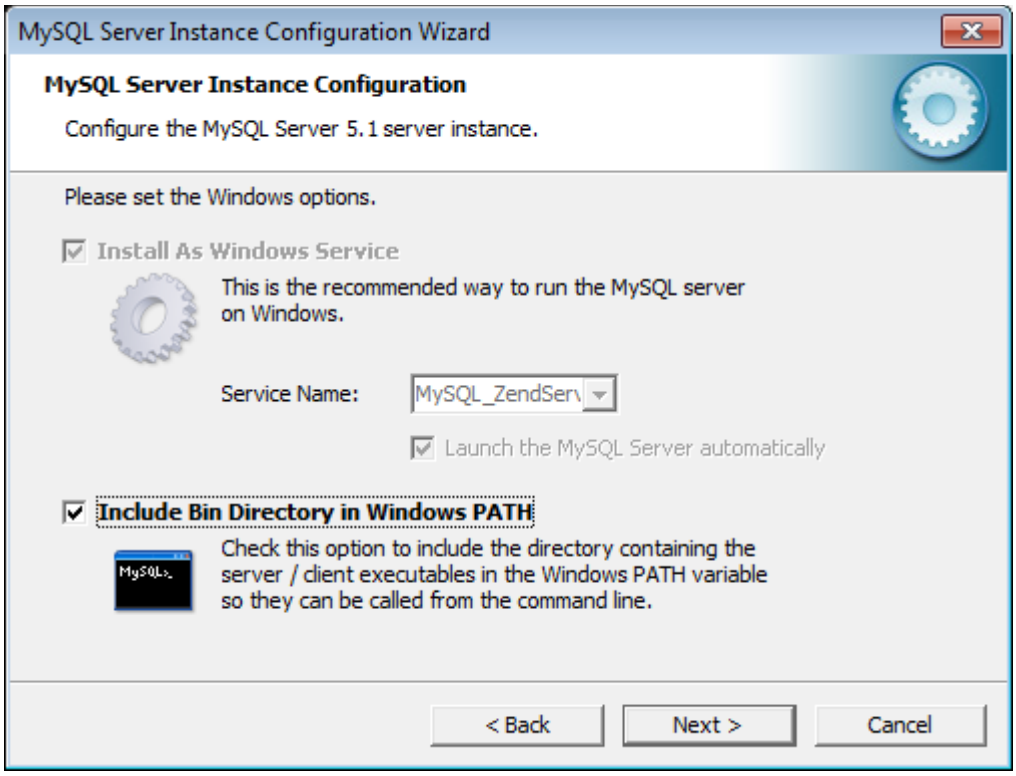
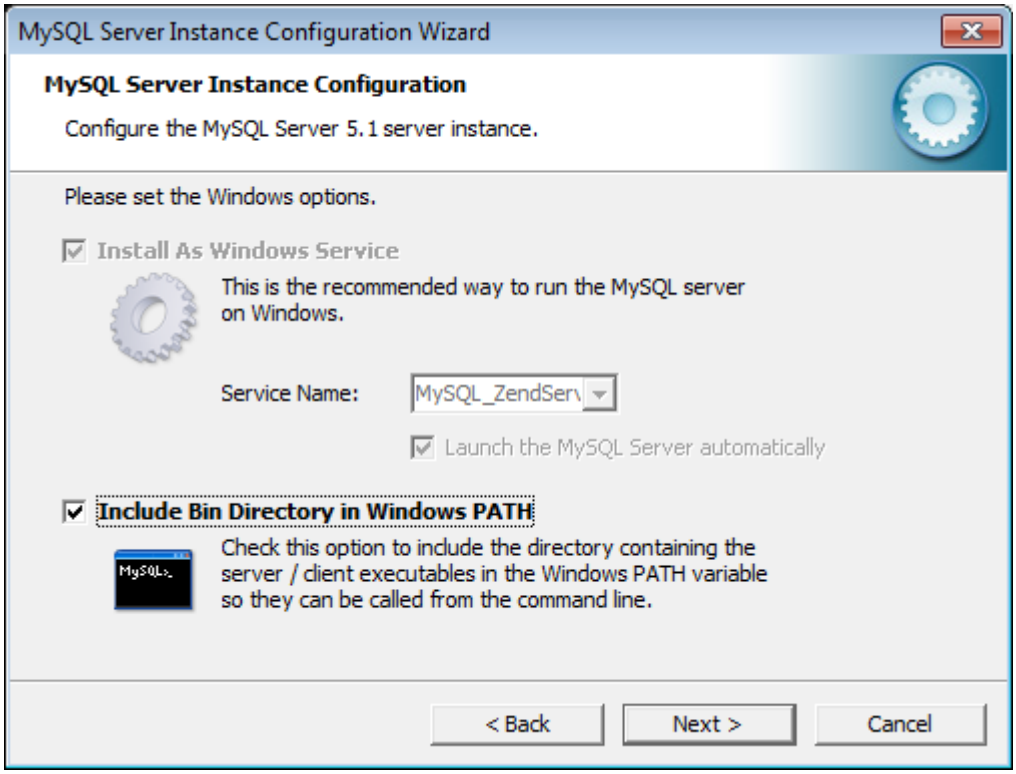




Type password for root:

- Current password: Leave blank
- New password & confirm: 123456


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please set the Windows options.
Install As Windows Service
This is the recommended way to run the MySQL server on Windows.
Service Name:
MySQL_ZendSer
Launch the MySQL Server automatically
Include Bin Directory in Windows PATH
Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.
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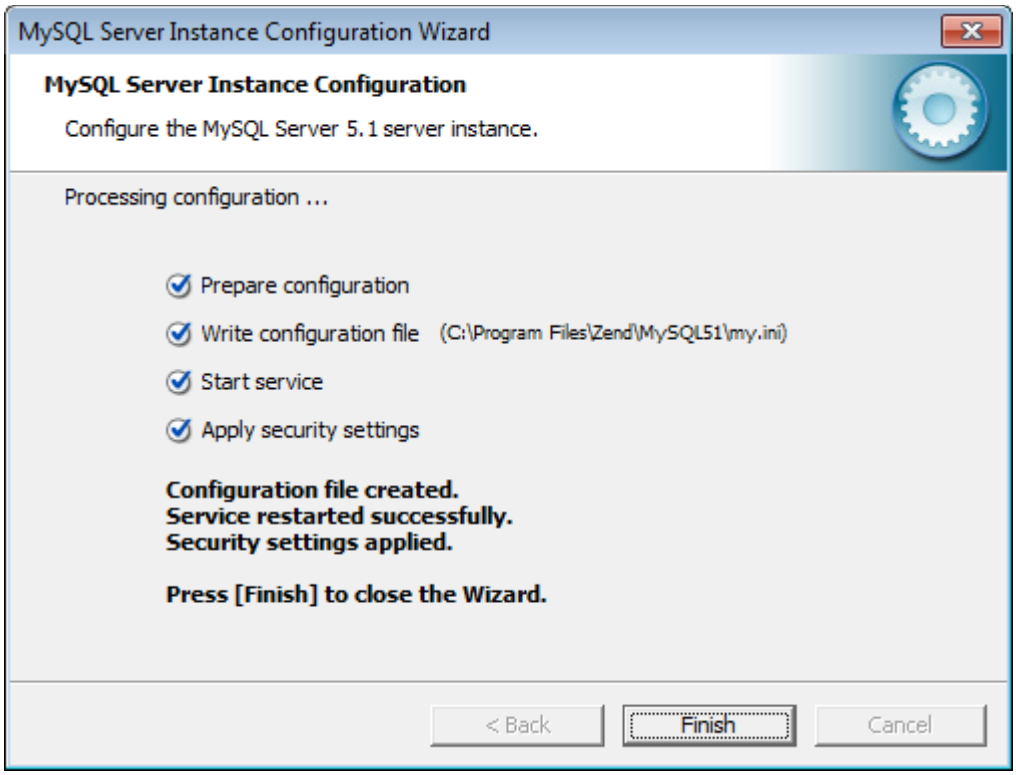
Cancel


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Processing configuration ...
Prepare configuration
Write configuration file (C:\Program Files\Zend\MySQL51\my.ini)
Start service
Apply security settings
Configuration file created.
Service restarted successfully.
Security settings applied.
Press [Finish] to close the Wizard.
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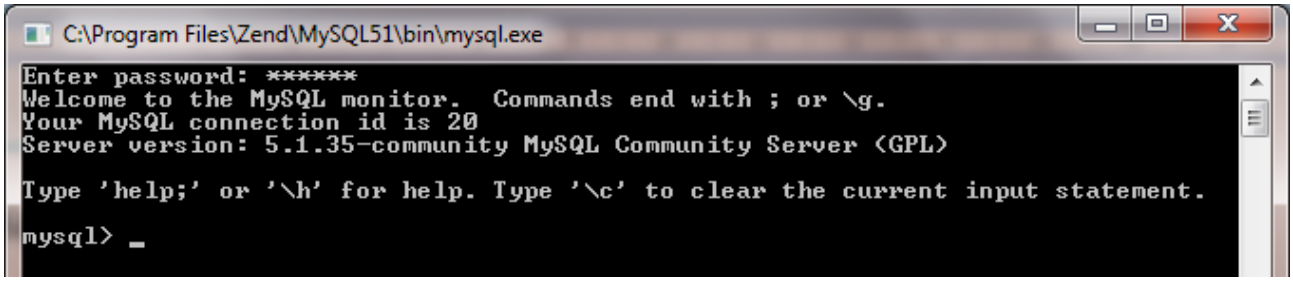
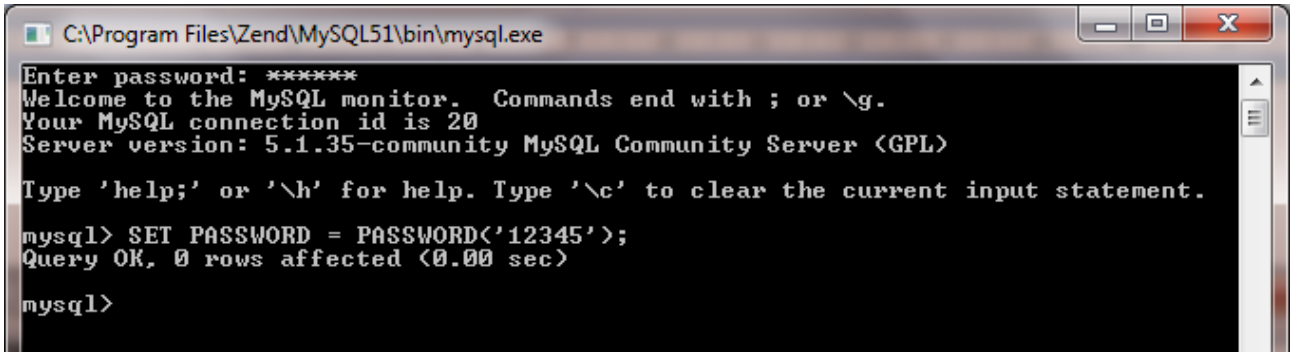
Finish
Cancel

6.2. MySQL Command Line Client

Step 1. Change password for root username (if necessary)



- Type: **SET PASSWORD = PASSWORD('new_**pass'**);** to change password for root.



Step 2. Investigate mysql database

- Show and use **mysql** database

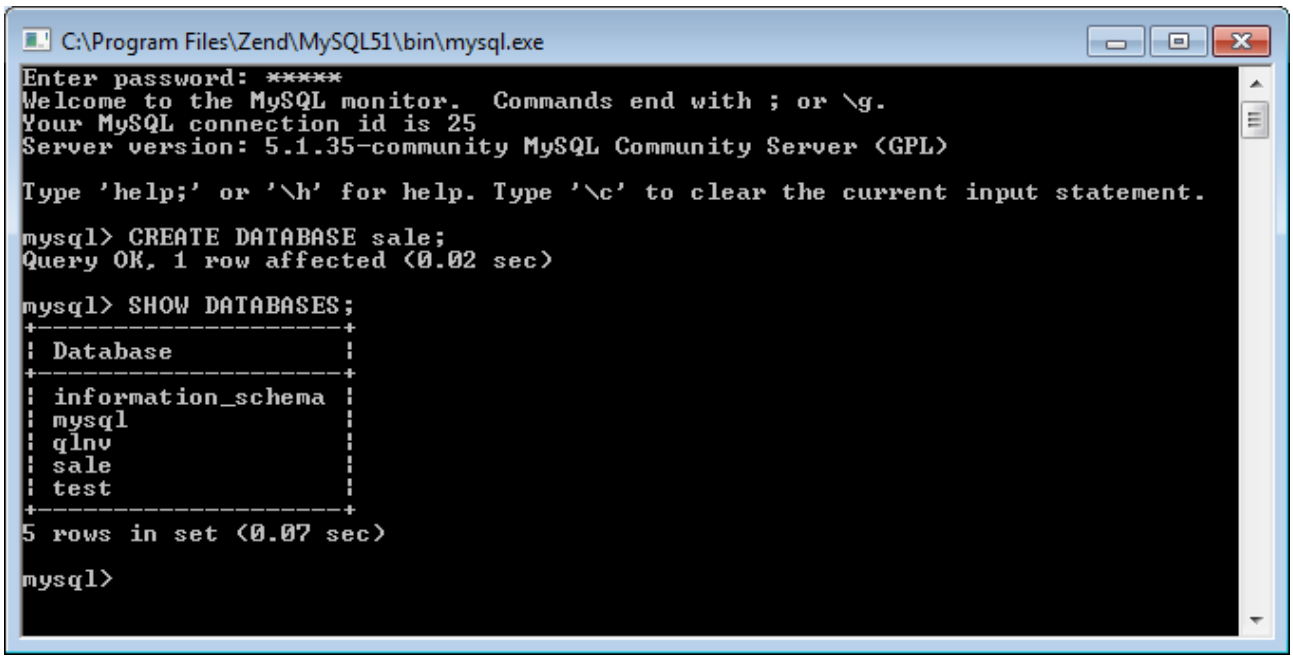
- Display all tables in the **mysql** database

```
mysql> show tables;
+---------------------------+
| Tables_in_mysql           |
+---------------------------+
| columns_priv              |
| db                        |
| event                     |
| func                      |
| general_log               |
| help_category             |
| help_keyword              |
| help_relation             |
| help_topic                |
| host                      |
| ndb_binlog_index          |
| plugin                    |
| proc                      |
| procs_priv                |
| servers                   |
| slow_log                  |
| tables_priv               |
| time_zone                 |
| time_zone_leap_second     |
| time_zone_name            |
| time_zone_transition      |
| time_zone_transition_type |
| user                      |
+---------------------------+
23 rows in set (0.01 sec)
```

- View column details for **user** table

```
C:\Program Files\Zend\MySQL51\bin\mysql.exe        EN English (United States)  Help
mysql> desc user;
+------------------------+-----------------------------------+------+-----+------
---+-------+
| Field                  | Type                              | Null | Key | Defau
lt | Extra |
+------------------------+-----------------------------------+------+-----+------
---+-------+
| Host                   | char(60)                          | NO   | PRI |
   |       |
| User                   | char(16)                          | NO   | PRI |
   |       |
| Password               | char(41)                          | NO   |     |
   |       |
| Select_priv            | enum('N','Y')                     | NO   |     | N
   |       |
| Insert_priv            | enum('N','Y')                     | NO   |     | N
   |       |
| Update_priv            | enum('N','Y')                     | NO   |     | N
   |       |
| Delete_priv            | enum('N','Y')                     | NO   |     | N
   |       |
| Create_priv            | enum('N','Y')                     | NO   |     | N
   |       |
| Drop_priv              | enum('N','Y')                     | NO   |     | N
   |       |
| Reload_priv            | enum('N','Y')                     | NO   |     | N
   |       |
| Shutdown_priv          | enum('N','Y')                     | NO   |     | N
   |       |
| Process_priv           | enum('N','Y')                     | NO   |     | N
   |       |
| File_priv              | enum('N','Y')                     | NO   |     | N
   |       |
| Grant_priv             | enum('N','Y')                     | NO   |     | N
   |       |
| References_priv        | enum('N','Y')                     | NO   |     | N
   |       |
| Index_priv             | enum('N','Y')                     | NO   |     | N
   |       |
| Alter_priv             | enum('N','Y')                     | NO   |     | N
   |       |
| Show_db_priv           | enum('N','Y')                     | NO   |     | N
   |       |
| Super_priv             | enum('N','Y')                     | NO   |     | N
   |       |
| Create_tmp_table_priv  | enum('N','Y')                     | NO   |     | N
   |       |
| Lock_tables_priv       | enum('N','Y')                     | NO   |     | N
```

- Create database named **sale** to run examples from the lecture.

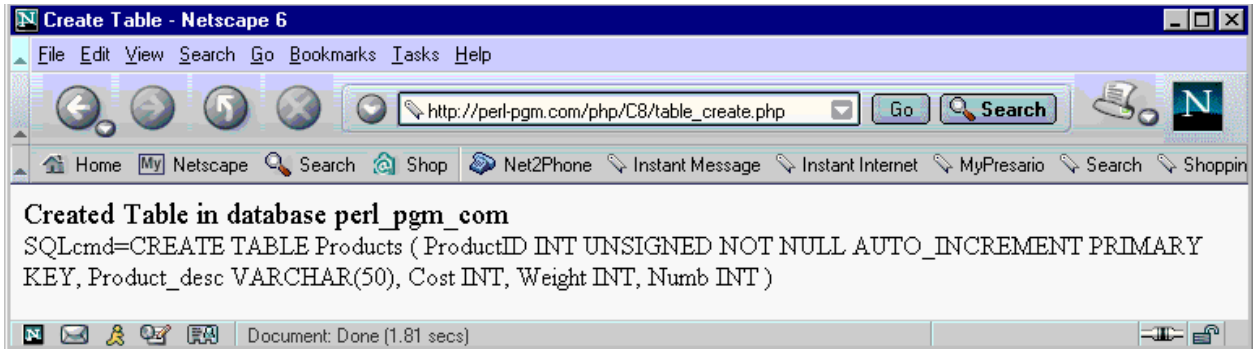


6.3. Examples in the lecture slides

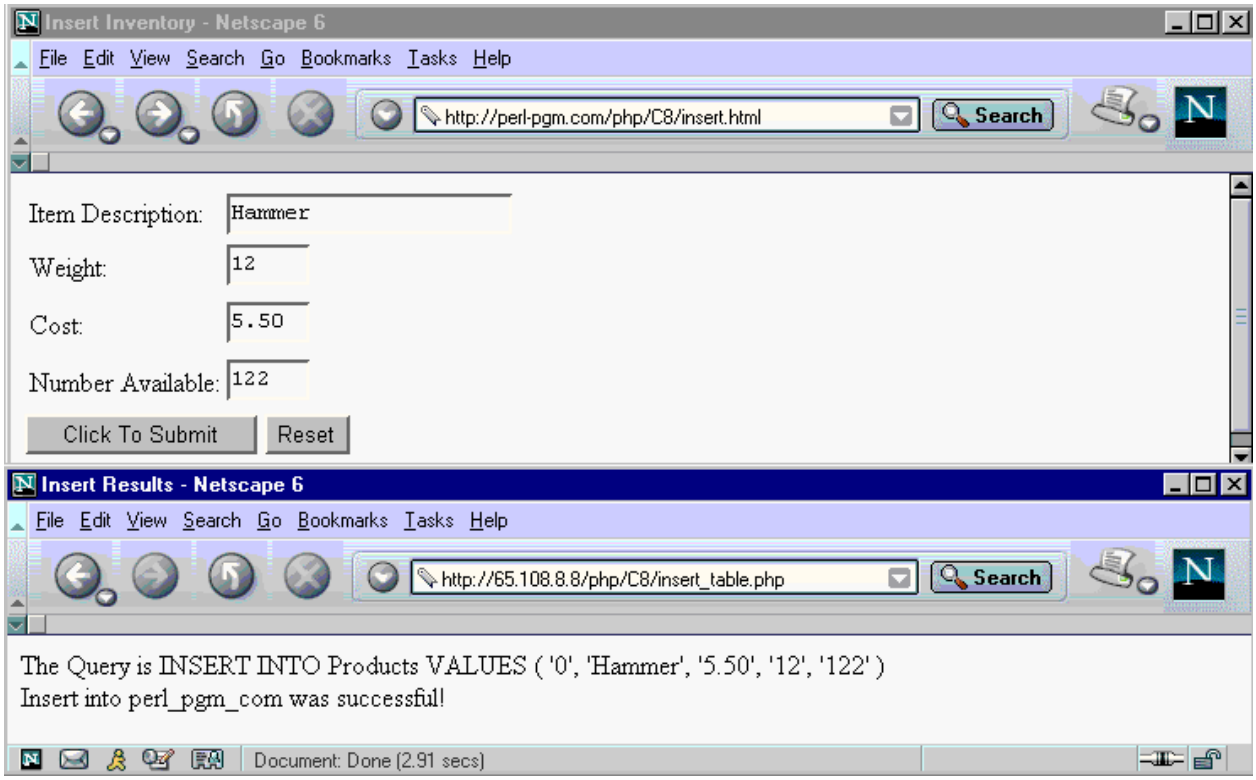
Step 1. Create table Products using PHP scripts

```
1. <html><head><title>Create Table</title></head><body>
2. <?php
3. $server = 'localhost';
4. $user = 'phppgm';
5. $pass = 'mypasswd';
6. $mydb = 'mydatabase';
7. $table_name = 'Products';
8. $connect = mysql_connect($server, $user, $pass);
9. if (!$connect) {
10.      die ("Cannot connect to $server using $user");
11. } else {
12.      $SQLcmd = "CREATE TABLE $table_name(
                        ProductID INT UNSIGNED NOT NULL
                              AUTO_INCREMENT PRIMARY KEY,
                        Product_desc VARCHAR(50),
                        Cost INT,
                        Weight INT,
                        Numb INT)";
13.  mysql_select_db($mydb);
14.  if (mysql_query($SQLcmd, $connect)){
15.    print '<font size="4" color="blue" >Created Table';
16.    print "<i>$table_name</i> in database<i>$mydb</i><br></font>";
17.    print "<br>SQLcmd=$SQLcmd";
18.  } else {
19.    die ("Table Create Creation Failed SQLcmd=$SQLcmd");
20.  }
21.  mysql_close($connect);
22. }
23. ?></body></html>
```

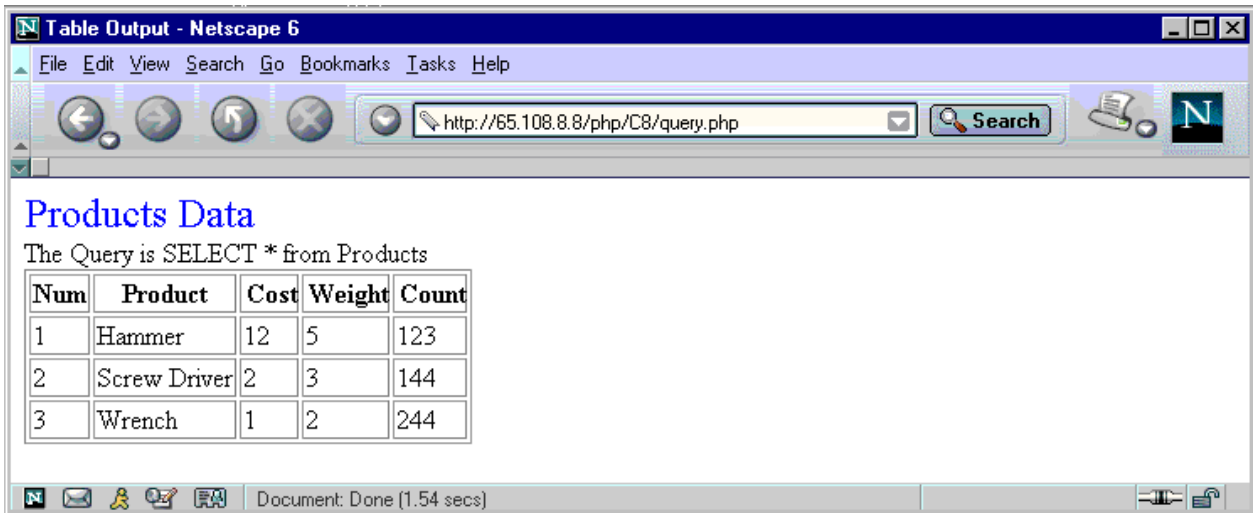
The result after creating table successfully:



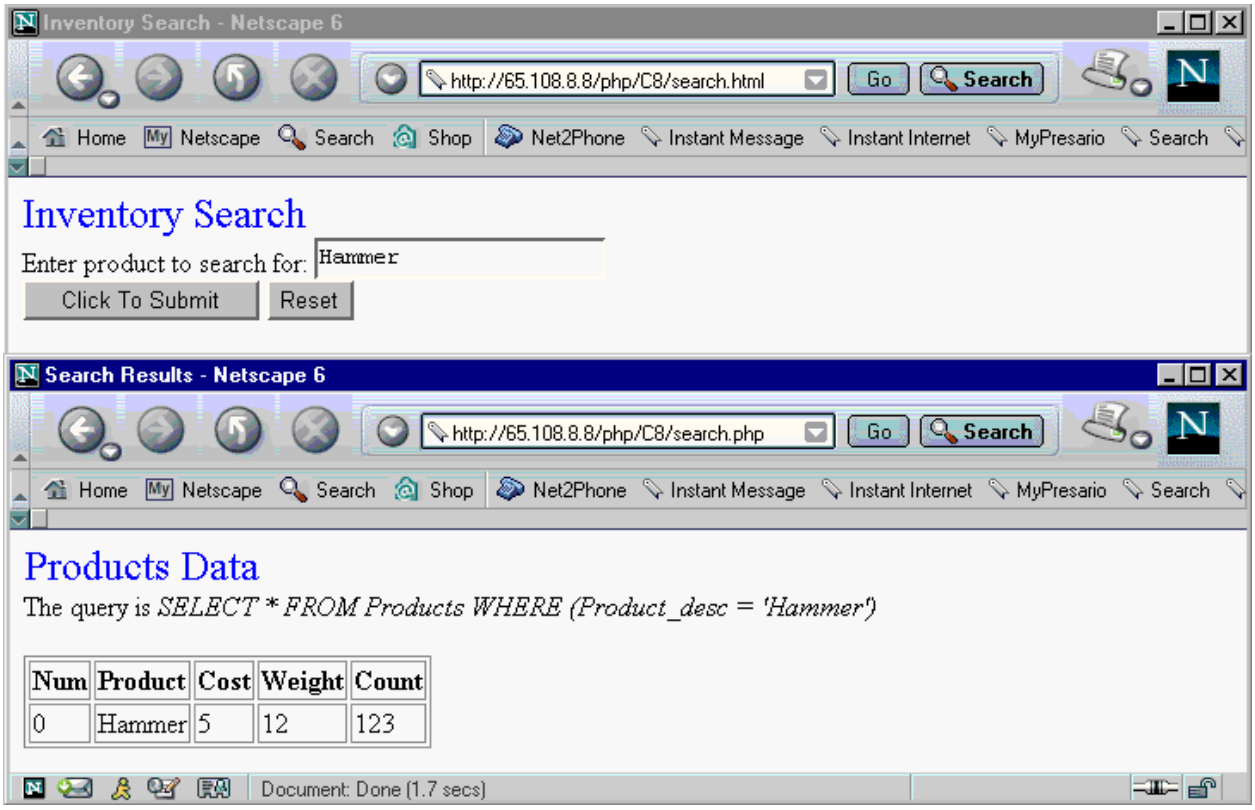
Step 2. Insert data to Products



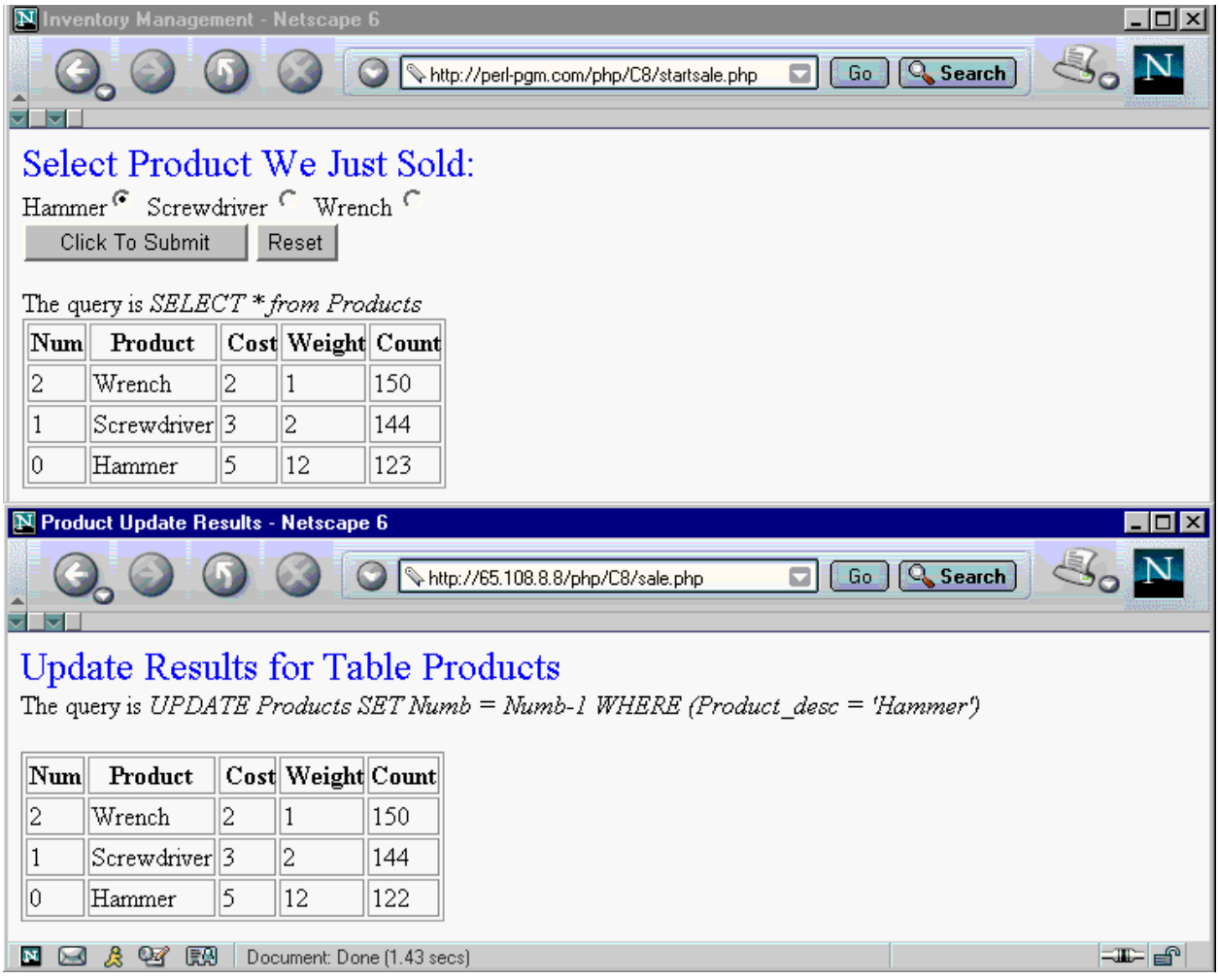
Step 3. Display list of products



Step 4. Search products



Step 5. Update product



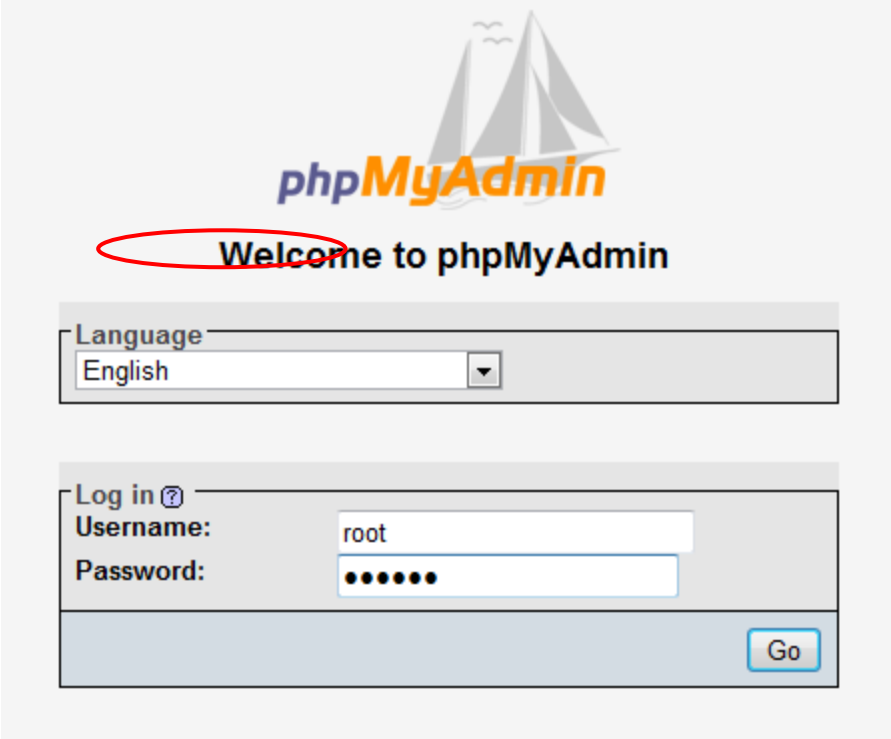
6.4. phpMyAdmin

Step 1. Install phpMyAdmin

Link: https://www.phpmyadmin.net/

Step 2. Open phpMyAdmin

- Enter username (root) and password (123456)



Step 3. Create tables and relationships for business listing service

Create a database named business_service. Create tables and relationships as the following design:

6.5. Exercise 1: Category Administration page

Design the following page for Category Administration to add a category:

6.6. Exercise 2: Business Registration page

Design the following page for Business Registration to add a business. Users can choose multiple categories for the business in the list in the left of the page.

6.7. Exercise 3: Business listing page

Design the following page for Business Listing to display a list of businesses for a specific category. Users can click to the list of categories in the left view the list of corresponding businesses.