CREATE MYSQL TABLES

The table creation command requires:

- Name of the table

- Names of fields

- Definitions for each field

Syntax:

Here is generic SQL syntax to create a MySQL table:

```
CREATE TABLE table_name (column_name column_type);
```

Now, we will create following table in **TUTORIALS** database.

```
tutorials_tbl(
   tutorial_id INT NOT NULL AUTO_INCREMENT,
   tutorial_title VARCHAR(100) NOT NULL,
   tutorial_author VARCHAR(40) NOT NULL,
   submission_date DATE,
   PRIMARY KEY ( tutorial_id )
);
```

Here few items need explanation:

- Field Attribute **NOT NULL** is being used because we do not want this field to be NULL. So if user will try to create a record with NULL value, then MySQL will raise an error.

- Field Attribute **AUTO_INCREMENT** tells MySQL to go ahead and add the next available number to the id field.

- Keyword **PRIMARY KEY** is used to define a column as primary key. You can use multiple columns separated by comma to define a primary key.

Creating Tables from Command Prompt:

This is easy to create a MySQL table from mysql> prompt. You will use SQL command **CREATE TABLE** to create a table.

Example:

Here is an example, which creates **tutorials_tbl**:

```
root@host# mysql -u root -p
Enter password:*******
mysql> use TUTORIALS;
Database changed
mysql> CREATE TABLE tutorials_tbl(
   -> tutorial_id INT NOT NULL AUTO_INCREMENT,
   -> tutorial_title VARCHAR(100) NOT NULL,
   -> tutorial_author VARCHAR(40) NOT NULL,
   -> submission_date DATE,
   -> PRIMARY KEY ( tutorial_id )
   -> );
Query OK, 0 rows affected (0.16 sec)
mysql>
```

NOTE: MySQL does not terminate a command until you give a semicolon (;) at the end of SQL command.

Creating Tables Using PHP Script:

To create new table in any existing database you would need to use PHP function **mysql_query()**. You will pass its second argument with proper SQL command to create a table.

Example:

Here is an example to create a table using PHP script:

```
<html>
<head>
<title>Creating MySQL Tables</title>
</head>
<body>
<?php
$dbhost = 'localhost:3036';
$dbuser = 'root';
$dbpass = 'rootpassword';
$conn = mysql_connect($dbhost, $dbuser, $dbpass);
if(! $conn )
{
  die('Could not connect: ' . mysql_error());
}
echo 'Connected successfully<br />';
$sql = "CREATE TABLE tutorials_tbl( ".
       "tutorial_id INT NOT NULL AUTO_INCREMENT, ".
       "tutorial_title VARCHAR(100) NOT NULL, ".
       "tutorial_author VARCHAR(40) NOT NULL, ".
       "submission_date DATE, ".
       "PRIMARY KEY ( tutorial_id )); ";
mysql_select_db( 'TUTORIALS' );
$retval = mysql_query( $sql, $conn );
if(! $retval )
{
  die('Could not create table: ' . mysql_error());
}
echo "Table created successfully\n";
mysql_close($conn);
?>
</body>
</html>
```