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:

```php
<?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);
?>
</html>
```