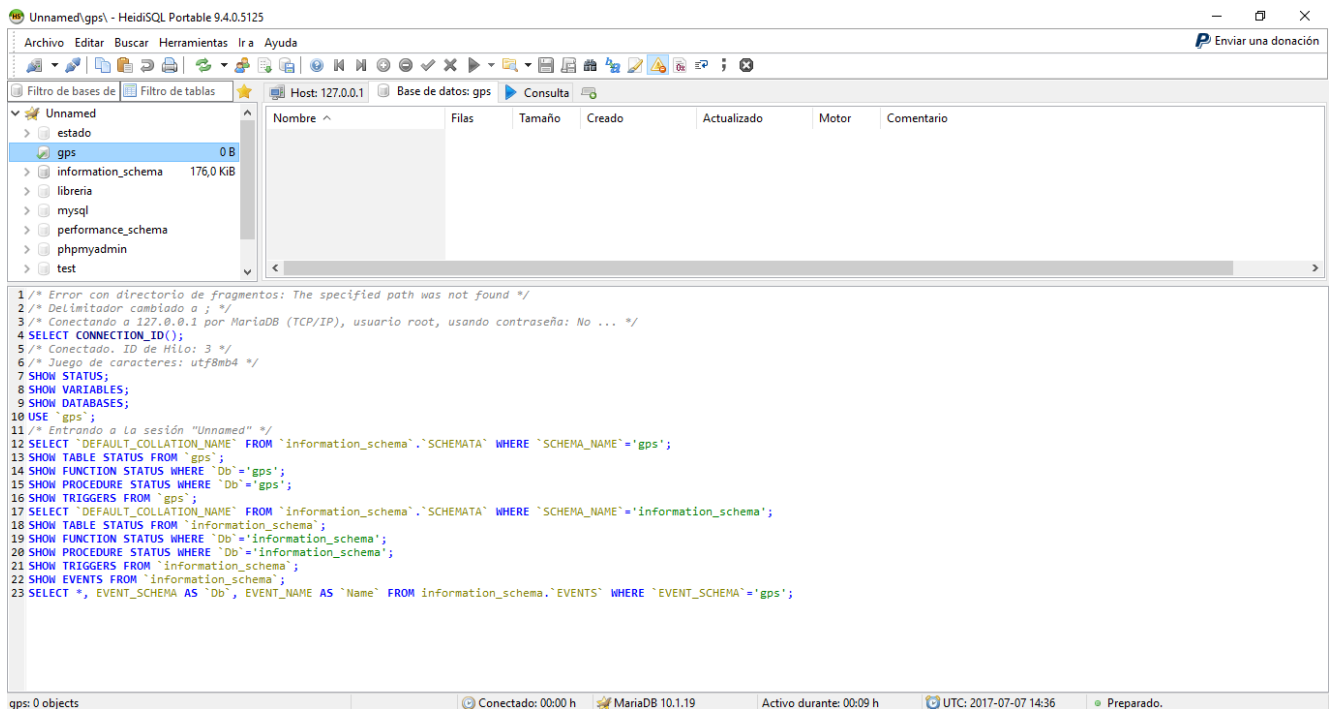


Ejercicios de PowerShell: crear una base de datos llamada gps y almacenar posiciones GPS

Crear la base de datos gps en MySQL desde PowerShell

```
[void][System.Reflection.Assembly]::LoadWithPartialName("MySQL
.Data")
$Connection = New-Object
MySQL.Data.MySqlClient.MySqlConnection
$ConnectionString = "server=" + "localhost" +
";port=3306;uid=" + "root" + ";pwd=" + ";"
$Connection.ConnectionString = $ConnectionString
$Connection.Open()

$query = 'create database gps'
$Command = New-Object
MySQL.Data.MySqlClient.MySqlCommand($Query, $Connection)
$DataAdapter = New-Object
MySQL.Data.MySqlClient.MySqlDataAdapter($Command)
$DataSet = New-Object System.Data.DataSet
$RecordCount = $DataAdapter.Fill($DataSet, "data")
$DataSet.Tables[0]
$Connection.Close()
```



Crear la tabla result con las columnas: ID, address, lat, lng y date

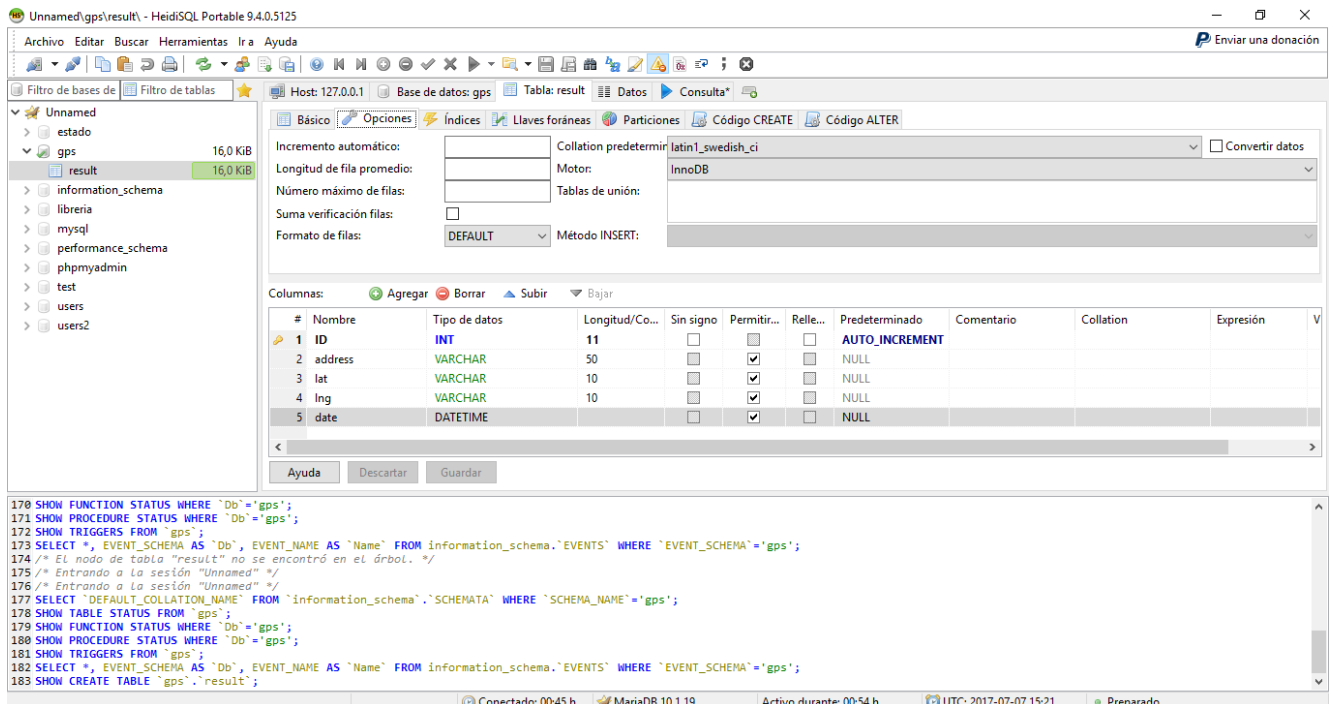
```
[void][System.Reflection.Assembly]::LoadWithPartialName("MySQL.Data")
```

```
$Connection = New-Object
MySQL.Data.MySqlClient.MySqlConnection
$ConnectionString = "server=" + "localhost" +
";port=3306;uid=" + "root" + ";pwd=" + ";database="+ "gps"
$Connection.ConnectionString = $ConnectionString
$Connection.Open()
```

```
$Query = 'create table result(ID int auto_increment primary
key, address varchar(50), lat varchar(10), lng varchar(10),
date datetime)'
```

```
$Command = New-Object
MySQL.Data.MySqlClient.MySqlCommand($Query, $Connection)
$DataAdapter = New-Object
MySQL.Data.MySqlClient.MySqlDataAdapter($Command)
$DataSet = New-Object System.Data.DataSet
$RecordCount = $dataAdapter.Fill($dataSet, "data")
$DataSet.Tables[0]
```

```
$Connection.Close()
```

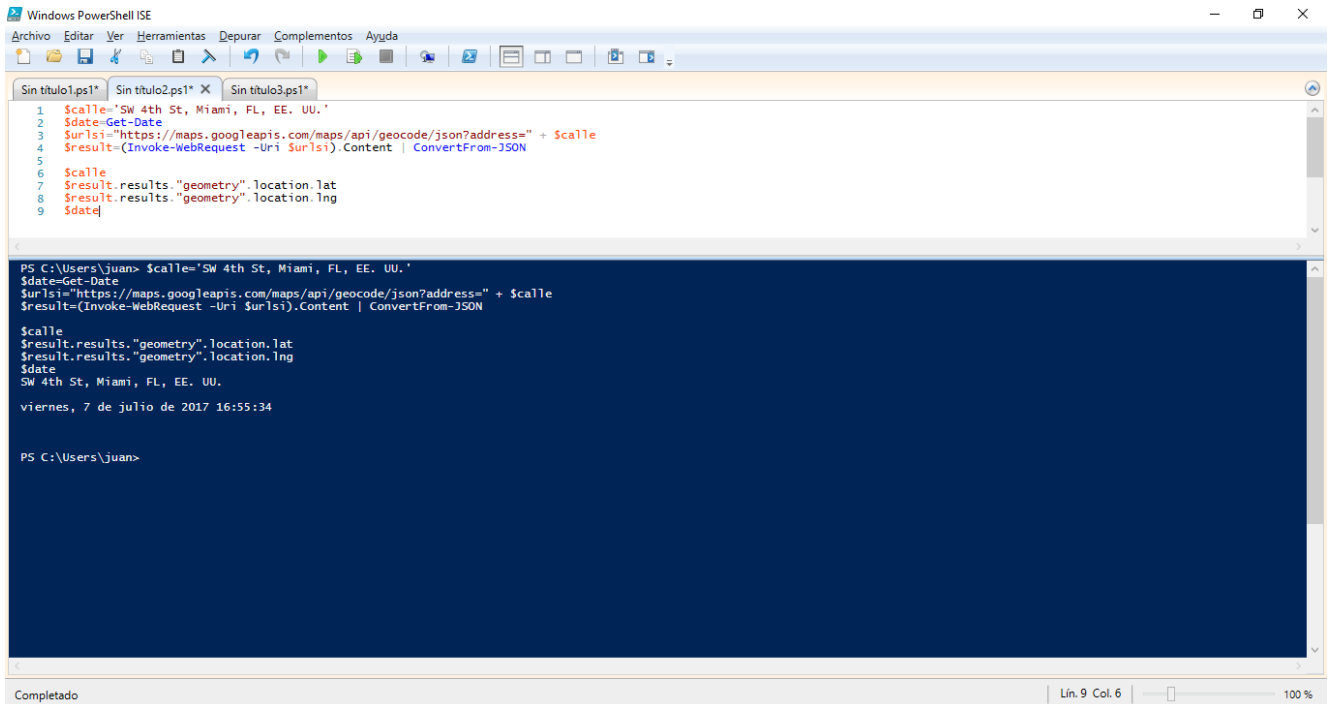


Insertar datos en la tabla gps obtenidos de una consulta a Google Maps

Consulta a Google Maps

```
$calle='SW 4th St, Miami, FL, EE. UU.'
$date=Get-Date
$urlsi="https://maps.googleapis.com/maps/api/geocode/json?address=" + $calle
$result=(Invoke-WebRequest -Uri $urlsi).Content | ConvertFrom-JSON
```

```
$calle
$result.results."geometry".location.lat
$result.results."geometry".location.lng
$date
```



```
1 $calle='SW 4th St, Miami, FL, EE. UU.'
2 $date=Get-Date
3 $urlsi="https://maps.googleapis.com/maps/api/geocode/json?address=" + $calle
4 $result=(Invoke-WebRequest -Uri $urlsi).Content | ConvertFrom-JSON
5
6 $calle
7 $result.results."geometry".location.lat
8 $result.results."geometry".location.lng
9 $date

PS C:\Users\juan> $calle='SW 4th St, Miami, FL, EE. UU.'
$date=Get-Date
$urlsi="https://maps.googleapis.com/maps/api/geocode/json?address=" + $calle
$result=(Invoke-WebRequest -Uri $urlsi).Content | ConvertFrom-JSON

$calle
$result.results."geometry".location.lat
$result.results."geometry".location.lng
$date
SW 4th St, Miami, FL, EE. UU.
viernes, 7 de julio de 2017 16:55:34

PS C:\Users\juan>
```

Insertar datos en la tabla gps

```
$calle='SW 4th St, Miami, FL, EE. UU.'
$date=Get-Date
$urlsi="https://maps.googleapis.com/maps/api/geocode/json?address=" + $calle
$result=(Invoke-WebRequest -Uri $urlsi).Content | ConvertFrom-JSON
$date=(Get-Date).Year.toString()+'-' + (Get-Date).Month.toString()+'-' + (Get-Date).Day.toString()+'-' + (Get-Date).Hour.ToString()+'-' + (Get-Date).Minute.ToString()+'-' + (Get-Date).Second.toString()
```

```
$calle
$lat=$result.results."geometry".location.lat
$lng=$result.results."geometry".location.lng
$date
```

```
[void][System.Reflection.Assembly]::LoadWithPartialName("MySQL.Data")
$Connection = New-Object MySQL.Data.MySqlClient.MySqlConnection
$ConnectionString = "server=" + "localhost" + ";port=3306;uid=" + "root" + ";pwd=" + ";database="+ "gps"
$Connection.ConnectionString = $ConnectionString
```

```
$Connection.Open()
```

```
#####
```

```
#Insertar en tabla result
```

```
#####
```

```
$Query = "INSERT INTO result (address, lat, lng, date) values  
('"+$calle+"', '"+$lat+"', '"+$lng+"', '"+$date+"')"
```

```
$Query
```

```
$Command = New-Object
```

```
MySQL.Data.MySqlClient.MySqlCommand($Query, $Connection)
```

```
$DataAdapter = New-Object
```

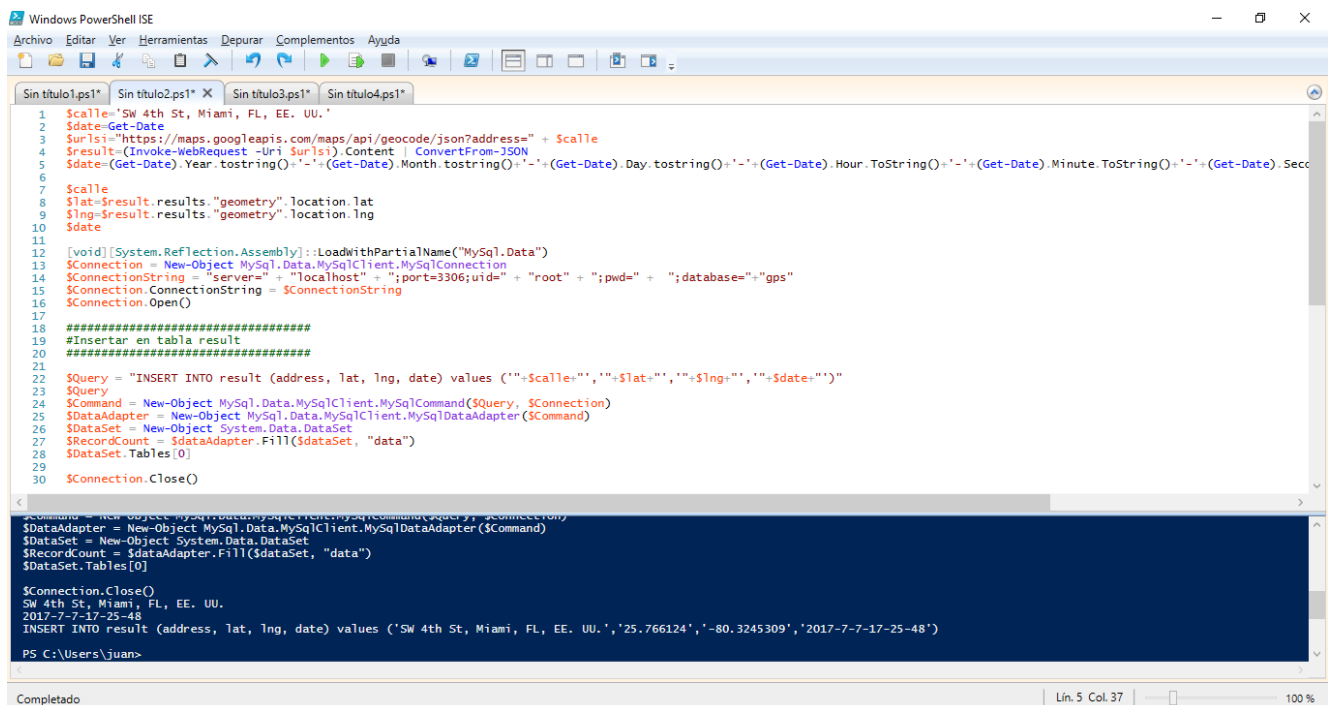
```
MySQL.Data.MySqlClient.MySqlDataAdapter($Command)
```

```
$DataSet = New-Object System.Data.DataSet
```

```
$RecordCount = $dataAdapter.Fill($DataSet, "data")
```

```
$DataSet.Tables[0]
```

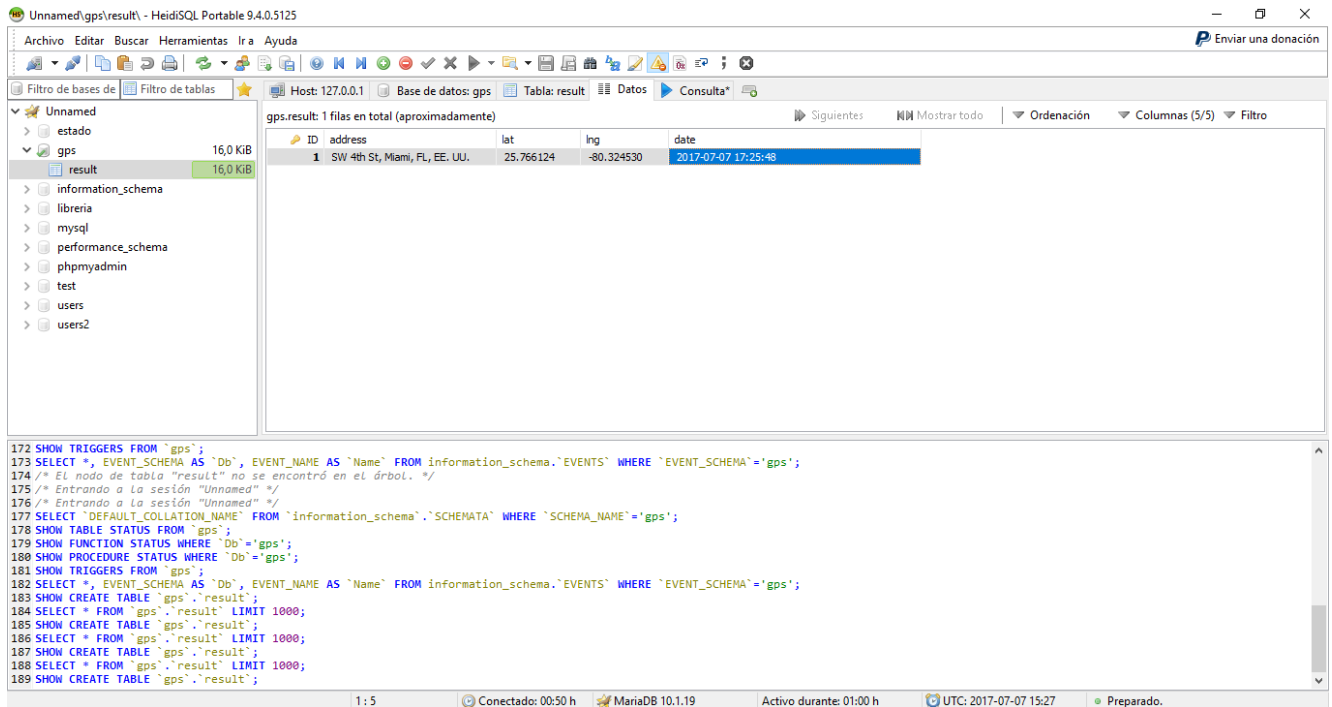
```
$Connection.Close()
```



```
Windows PowerShell ISE
Archivo Editar Ver Herramientas Depurar Complementos Ayuda
Sin titulo1.ps1 Sin titulo2.ps1 Sin titulo3.ps1 Sin titulo4.ps1
1 $calle='SW 4th St, Miami, FL, EE. UU.'
2 $date=Get-Date
3 $urlsi="https://maps.googleapis.com/maps/api/geocode/json?address=" + $calle
4 $result=(Invoke-WebRequest -Uri $urlsi).Content | ConvertFrom-JSON
5 $date=(Get-Date).Year.ToString()+"-"+(Get-Date).Month.ToString()+"-"+(Get-Date).Day.ToString()+"-"+(Get-Date).Hour.ToString()+"-"+(Get-Date).Minute.ToString()+"-"+(Get-Date).Second.ToString()
6
7 $calle
8 $lat=$result.results."geometry".location.lat
9 $lng=$result.results."geometry".location.lng
10 $date
11
12 [void][System.Reflection.Assembly]::LoadWithPartialName("MySQL.Data")
13 $Connection = New-Object MySQL.Data.MySqlClient.MySqlConnection
14 $ConnectionString = "server=" + "localhost" + ";port=3306;uid=" + "root" + ";pwd=" + ";database="+"gps"
15 $Connection.ConnectionString = $ConnectionString
16 $Connection.Open()
17
18 #####
19 #Insertar en tabla result
20 #####
21
22 $Query = "INSERT INTO result (address, lat, lng, date) values ('"+$calle+"', '"+$lat+"', '"+$lng+"', '"+$date+"')"
```

```
$Query
$Command = New-Object MySQL.Data.MySqlClient.MySqlCommand($Query, $Connection)
$DataAdapter = New-Object MySQL.Data.MySqlClient.MySqlDataAdapter($Command)
$DataSet = New-Object System.Data.DataSet
$RecordCount = $dataAdapter.Fill($DataSet, "data")
$DataSet.Tables[0]
$Connection.Close()
SW 4th St, Miami, FL, EE. UU.
2017-7-7-17-25-48
INSERT INTO result (address, lat, lng, date) values ('SW 4th St, Miami, FL, EE. UU.', '25.766124', '-80.3245309', '2017-7-7-17-25-48')
PS C:\Users\Juan>
```

Completado Lin. 5 Col. 37 100 %



Realizar una consulta a la base de datos gps y mostrar los datos que tiene la tabla result

```
[void][System.Reflection.Assembly]::LoadWithPartialName("MySQL.Data")
```

```
$Connection = New-Object
MySQL.Data.MySqlClient.MySqlConnection
$ConnectionString = "server=" + "localhost" +
";port=3306;uid=" + "root" + ";pwd=" + ";database="+ "gps"
$Connection.ConnectionString = $ConnectionString
$Connection.Open()
```

```
$Query='select * from result'
$Command = New-Object
MySQL.Data.MySqlClient.MySqlCommand($Query, $Connection)
$DataAdapter = New-Object
MySQL.Data.MySqlClient.MySqlDataAdapter($Command)
$DataSet = New-Object System.Data.DataSet
$RecordCount = $dataAdapter.Fill($dataSet, "data")
$DataSet.Tables[0]
$Connection.Close()
```

Windows PowerShell ISE

Archivo Editar Ver Herramientas Depurar Complementos Ayuda

Sin título1.ps1 X

```
1 [void][System.Reflection.Assembly]::LoadWithPartialName("MySQL.Data")
2 $Connection = New-Object MySQL.Data.MySqlClient.MySqlConnection
3 $ConnectionString = "server=" + "localhost" + ";port=3306;uid=" + "root" + ";pwd=" + ";database="+ "gps"
4 $Connection.ConnectionString = $ConnectionString
5 $Connection.Open()
6
7 $Query='select * from result'
8 $Command = New-Object MySQL.Data.MySqlClient.MySqlCommand($Query, $Connection)
9 $DataAdapter = New-Object MySQL.Data.MySqlClient.MySqlDataAdapter($Command)
10 $DataSet = New-Object System.Data.DataSet
11 $RecordCount = $DataAdapter.Fill($DataSet, "data")
12 $DataSet.Tables[0]
13 $Connection.Close()
```

PS C:\Users\Juan> [void][System.Reflection.Assembly]::LoadWithPartialName("MySQL.Data")
\$Connection = New-Object MySQL.Data.MySqlClient.MySqlConnection
\$ConnectionString = "server=" + "localhost" + ";port=3306;uid=" + "root" + ";pwd=" + ";database="+ "gps"
\$Connection.ConnectionString = \$ConnectionString
\$Connection.Open()

\$Query='select * from result'
\$Command = New-Object MySQL.Data.MySqlClient.MySqlCommand(\$Query, \$Connection)
\$DataAdapter = New-Object MySQL.Data.MySqlClient.MySqlDataAdapter(\$Command)
\$DataSet = New-Object System.Data.DataSet
\$RecordCount = \$DataAdapter.Fill(\$DataSet, "data")
\$DataSet.Tables[0]
\$Connection.Close()

ID : 1
address : SW 4th St, Miami, FL, EE. UU.
lat : 25.766124
lng : -80.324530
date : 07/07/2017 17:25:48

ID : 2
address : SW 4th St, Miami, FL, EE. UU.
lat : 25.766124
lng : -80.324530
date : 07/07/2017 17:28:54

Completado Lin. 12 Col. 19 100 %