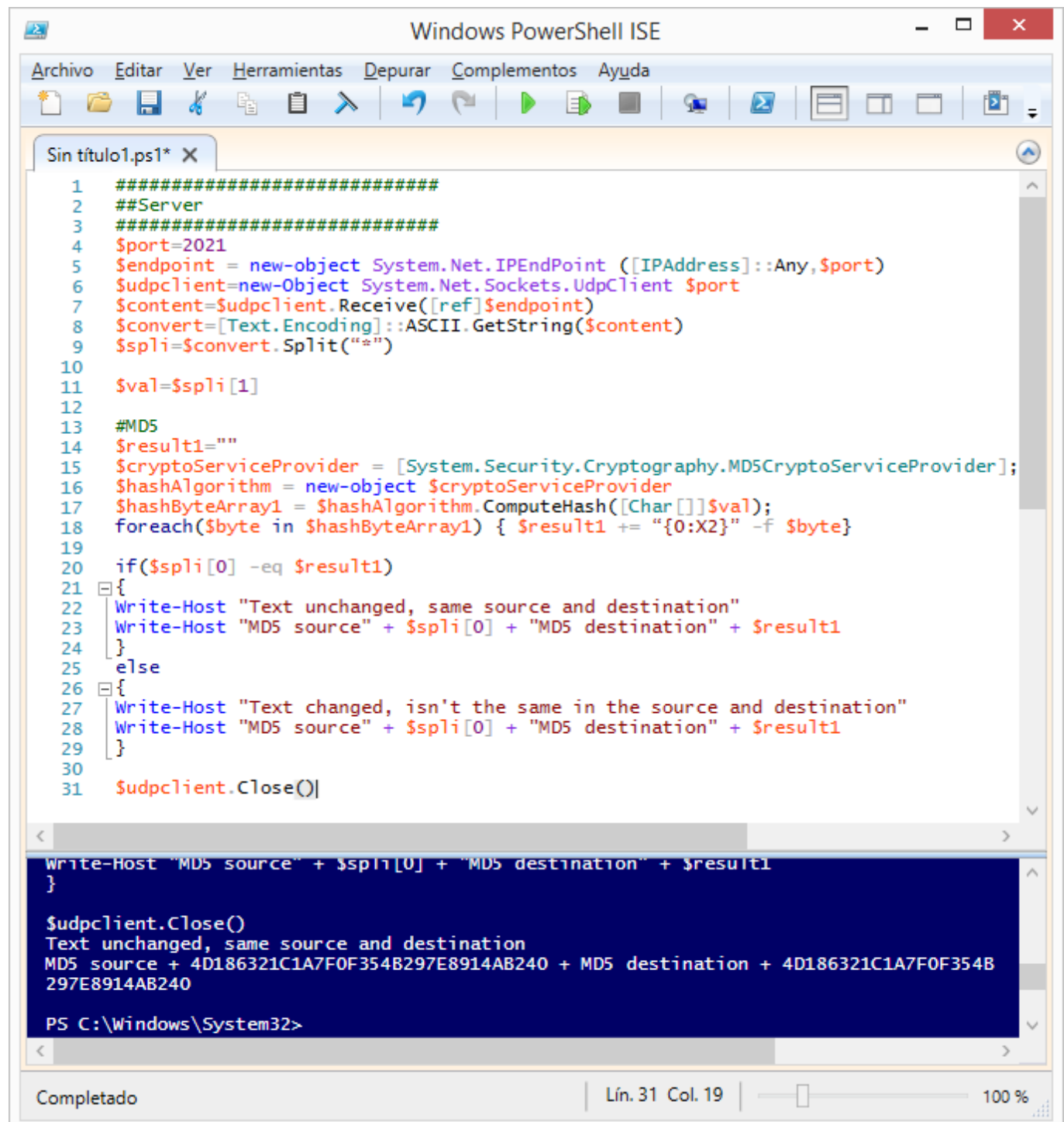


Check if a text has been modified during transmission (using MD5)

Server

[crayon-6a9d60007ba8e319709191/]



```
Windows PowerShell ISE
Archivo  Editar  Ver  Herramientas  Depurar  Complementos  Ayuda

Sin título1.ps1* X
1 #####
2 ##Server
3 #####
4 $port=2021
5 $endpoint = new-object System.Net.IPEndPoint ([IPAddress]::Any,$port)
6 $udpclient=new-object System.Net.Sockets.UdpClient $port
7 $content=$udpclient.Receive([ref]$endpoint)
8 $convert=[Text.Encoding]::ASCII.GetString($content)
9 $spli=$convert.Split("*")
10
11 $val=$spli[1]
12
13 #MD5
14 $result1=""
15 $cryptoServiceProvider = [System.Security.Cryptography.MD5CryptoServiceProvider];
16 $hashAlgorithm = new-object $cryptoServiceProvider
17 $hashByteArray1 = $hashAlgorithm.ComputeHash([Char[]]$val);
18 foreach($byte in $hashByteArray1) { $result1 += "{0:X2}" -f $byte}
19
20 if($spli[0] -eq $result1)
21 {
22     Write-Host "Text unchanged, same source and destination"
23     Write-Host "MD5 source" + $spli[0] + "MD5 destination" + $result1
24 }
25 else
26 {
27     Write-Host "Text changed, isn't the same in the source and destination"
28     Write-Host "MD5 source" + $spli[0] + "MD5 destination" + $result1
29 }
30
31 $udpclient.Close()

Write-Host "MD5 source" + $spli[0] + "MD5 destination" + $result1
}

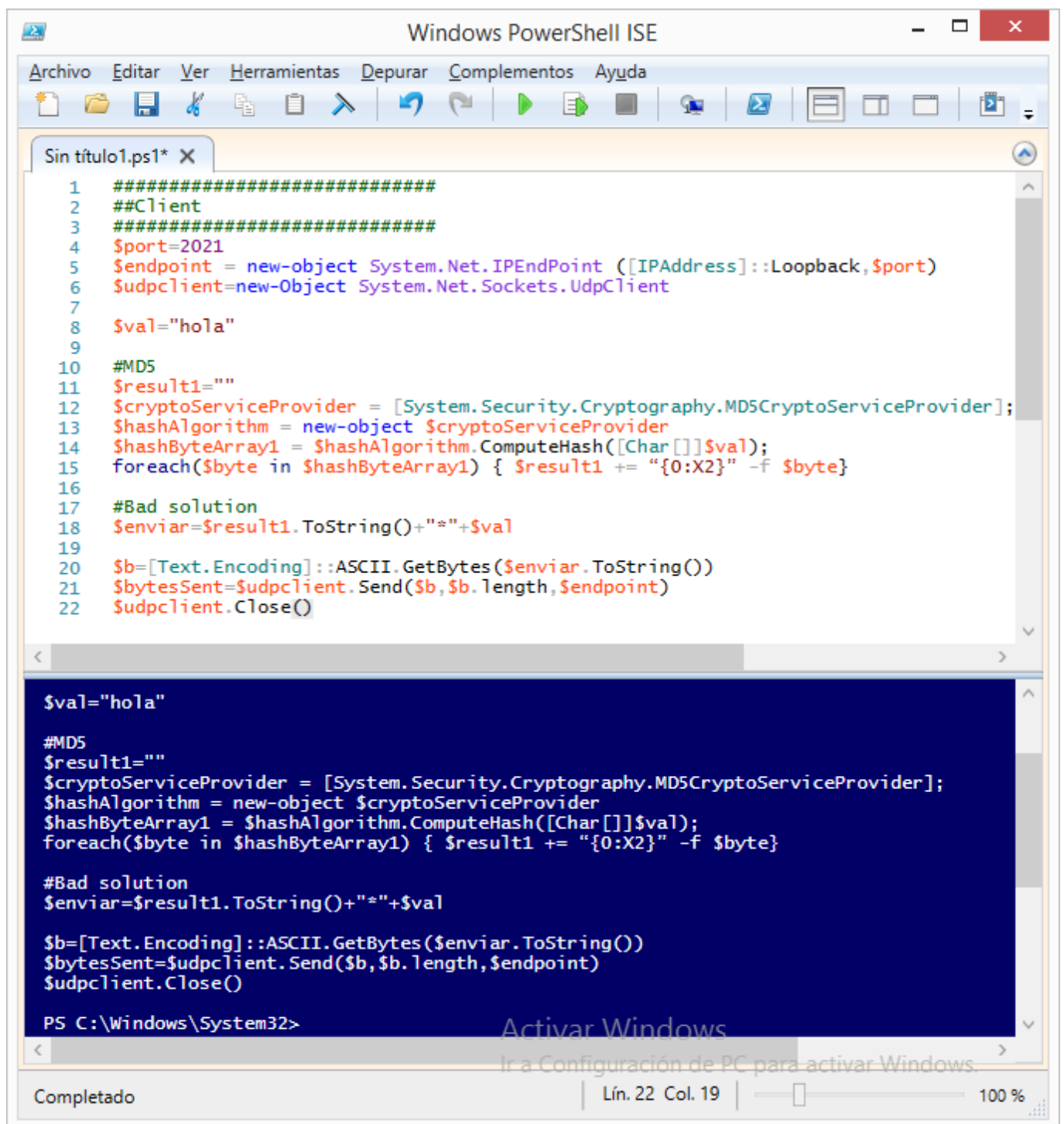
$udpclient.Close()
Text unchanged, same source and destination
MD5 source + 4D186321C1A7F0F354B297E8914AB240 + MD5 destination + 4D186321C1A7F0F354B
297E8914AB240

PS C:\Windows\System32>
```

Completado | Lín. 31 Col. 19 | 100 %

Client

[crayon-6a9d60007ba94464059069/]



```
Windows PowerShell ISE
Archivo  Editor  Ver  Herramientas  Depurar  Complementos  Ayuda

Sin título1.ps1* X

1 #####
2 ##Client
3 #####
4 $port=2021
5 $endpoint = new-object System.Net.IPEndPoint ([IPAddress]::Loopback,$port)
6 $udpcient=new-Object System.Net.Sockets.UdpClient
7
8 $val="hola"
9
10 #MD5
11 $result1=""
12 $cryptoServiceProvider = [System.Security.Cryptography.MD5CryptoServiceProvider];
13 $hashAlgorithm = new-object $cryptoServiceProvider
14 $hashByteArray1 = $hashAlgorithm.ComputeHash([Char[]]$val);
15 foreach($byte in $hashByteArray1) { $result1 += "{0:X2}" -f $byte}
16
17 #Bad solution
18 $enviar=$result1.ToString()+"*"+$val
19
20 $b=[Text.Encoding]::ASCII.GetBytes($enviar.ToString())
21 $bytesSent=$udpcient.Send($b,$b.length,$endpoint)
22 $udpcient.Close()

$val="hola"

#MD5
$result1=""
$cryptoServiceProvider = [System.Security.Cryptography.MD5CryptoServiceProvider];
$hashAlgorithm = new-object $cryptoServiceProvider
$hashByteArray1 = $hashAlgorithm.ComputeHash([Char[]]$val);
foreach($byte in $hashByteArray1) { $result1 += "{0:X2}" -f $byte}

#Bad solution
$enviar=$result1.ToString()+"*"+$val

$b=[Text.Encoding]::ASCII.GetBytes($enviar.ToString())
$bytesSent=$udpcient.Send($b,$b.length,$endpoint)
$udpcient.Close()

PS C:\Windows\System32>
```

Activar Windows
Ir a Configuración de PC para activar Windows.

Completado | Lín. 22 Col. 19 | 100 %