To check if directory exists or not

```
using System;
using System.IO;
class Program
{
  static void Main()
  {
    string folderPath = @"C:\Users\YourUsername\Documents\TestFolder";
    if (Directory.Exists(folderPath))
    {
      Console.WriteLine("Folder exists.");
    }
    else
    {
      Console.WriteLine("Folder does not exist.");
    }
  }
}
```

To search for particular files in the directory\

```
using System;
using System.IO;
class Program
```

```
{
  static void Main()
  {
    string filePath = @"C:\MyFolder\example.txt";
    if (File.Exists(filePath))
    {
       Console.WriteLine("File exists.");
    }
    else
    {
       Console.WriteLine("File does not exist.");
    }
  }
}
To get all files from directory
string folderPath = @"C:\MyFolder";
string searchPattern = "example*.txt"; // Can also use "*.log", "data?.csv", etc.
string[] files = Directory.GetFiles(folderPath, searchPattern);
if (files.Length > 0)
{
  Console.WriteLine("Matching files found:");
  foreach (var file in files)
  {
    Console.WriteLine(file);
  }
}
else
```

```
{
  Console.WriteLine("No matching files found.");
}
Run powershell command in c#
using System;
using System. Diagnostics;
class Program
{
  static void Main()
  {
    // The PowerShell command you want to run
    string command = "Get-LocalUser | Select-Object Name, Enabled, PasswordRequired";
    // Set up the process info
    ProcessStartInfo psi = new ProcessStartInfo();
    psi.FileName = "powershell.exe";
    psi.Arguments = $"-Command \"{command}\"";
    psi.RedirectStandardOutput = true;
    psi.RedirectStandardError = true;
    psi.UseShellExecute = false;
    psi.CreateNoWindow = true;
    // Start the process
    Process process = Process.Start(psi);
    // Read the output
    string output = process.StandardOutput.ReadToEnd();
    string error = process.StandardError.ReadToEnd();
```

```
process.WaitForExit();
    // Display the result
    Console.WriteLine("Output:\n" + output);
    if (!string.lsNullOrWhiteSpace(error))
      Console.WriteLine("Error:\n" + error);
  }
}
2<sup>nd</sup> method require installation
using System;
using System. Management. Automation;
using System.Collections.ObjectModel;
class Program
{
  static void Main()
  {
    // Create a PowerShell instance
    using (PowerShell ps = PowerShell.Create())
    {
      // Add your PowerShell command
      ps.AddScript("Get-LocalUser | Select-Object Name, Enabled, PasswordRequired");
      // Execute the command
      Collection<PSObject> results = ps.Invoke();
      // Display the results
      foreach (var result in results)
      {
Console.WriteLine(result.Members["Name"].Value);
```

```
// Display any errors
if (ps.Streams.Error.Count > 0)
{
    Console.WriteLine("Errors:");
    foreach (var error in ps.Streams.Error)
    {
        Console.WriteLine(error.ToString());
    }
}
```

Get the main ip address

```
using System.Linq;
using System.Net;
using System.Net.NetworkInformation;
using System.Net.Sockets;

class Program
{
    static void Main()
    {
        string mainIp = GetLocalIPv4();
        Console.WriteLine("Main IP Address: " + mainIp);
    }
}
```

```
static string GetLocalIPv4()
{
  foreach (NetworkInterface ni in NetworkInterface.GetAllNetworkInterfaces())
  {
    if (ni.OperationalStatus != OperationalStatus.Up)
      continue;
    if (ni.NetworkInterfaceType == NetworkInterfaceType.Loopback | |
      ni.Description.ToLower().Contains("virtual") | |
      ni.Description.ToLower().Contains("vmware") | |
      ni.Description.ToLower().Contains("virtualbox") | |
      ni.Description.ToLower().Contains("tunnel"))
      continue;
    IPInterfaceProperties ipProps = ni.GetIPProperties();
    foreach (UnicastIPAddressInformation ip in ipProps.UnicastAddresses)
    {
      if (ip.Address.AddressFamily == AddressFamily.InterNetwork)
      {
        return ip.Address.ToString();
      }
    }
  }
  return "Not found";
}
```

(Get-NetIPAddress -AddressFamily IPv4 -InterfaceAlias "Wi-Fi").IPAddress

}

```
Get-NetIPAddress -AddressFamily IPv4 | Where-Object { $_.PrefixOrigin -eq "Dhcp" -and $_.IPAddress -notlike "169.*" } | Select-Object -ExpandProperty IPAddress
```

ipconfig | findstr /i "IPv4"

(Get-NetAdapter -Name "Wi-Fi").MacAddress

Get Ip and mac

```
using System;
using System.Linq;
using\ System. Net. Network Information;
using System.Net.Sockets;
class Program
{
  static void Main()
  {
    string mainIP = GetMainIPv4Address();
    Console.WriteLine("Main IPv4 Address: " + mainIP);
  }
  static string GetMainIPv4Address()
  {
    foreach (NetworkInterface ni in NetworkInterface.GetAllNetworkInterfaces())
    {
      if (ni.OperationalStatus != OperationalStatus.Up)
         continue;
      if (!ni.Supports(NetworkInterfaceComponent.IPv4))
         continue;
```

```
string desc = ni.Description.ToLower();
      if (desc.Contains("virtual") || desc.Contains("vmware") || desc.Contains("loopback") ||
desc.Contains("tunnel") || desc.Contains("pseudo"))
        continue;
      var ipProps = ni.GetIPProperties();
      var ip = ipProps.UnicastAddresses
         .FirstOrDefault(x => x.Address.AddressFamily == AddressFamily.InterNetwork);
      if (ip != null)
        return ip.Address.ToString();
    }
    return "Not Found";
  }
}
.....
using System;
using System.Net.NetworkInformation;
class Program
{
  static void Main()
  {
    string mac = GetMainMacAddress();
```

```
Console.WriteLine("Main MAC Address: " + mac);
  }
  static string GetMainMacAddress()
  {
    foreach (NetworkInterface ni in NetworkInterface.GetAllNetworkInterfaces())
    {
      if (ni.OperationalStatus != OperationalStatus.Up)
        continue;
      string desc = ni.Description.ToLower();
      if (desc.Contains("virtual") || desc.Contains("vmware") || desc.Contains("loopback") ||
desc.Contains("tunnel") || desc.Contains("pseudo"))
        continue;
      var macBytes = ni.GetPhysicalAddress().GetAddressBytes();
      if (macBytes.Length == 0) continue;
      return string.Join("-", macBytes.Select(b => b.ToString("X2")));
    }
    return "Not Found";
  }
}
```