1. Describe what is the class FileSystemWatcher good for:

C# FileSystemWatcher listens to the file system and places a watch on a directory, its subdirecttories, and files and notifies if any changes are made to the directory. This class is useful when you need to auto update the updates in a directory. For example, if you want to create an auto backup of a folder, you can implement a File system watcher service that watches a directory or entire machine and find when and what changes are made and copy the changes to the backup device.

1. difference between xmldocument and xmlreader

* XmlDocument represents the contents of an xml file. When loading it from a file, you read the entire file into memory.
* XmlReader is an abstract class able to read from xml data. It can read from a file, from an internet location, or from any other stream of data. When reading from a file, you **don't** load the entire document at once.

1. Describe basic usage of the class Monitor.

* The following example uses the [Monitor](https://docs.microsoft.com/en-us/dotnet/api/system.threading.monitor?view=net-6.0) class to synchronize access to a single instance of a random number generator represented by the [Random](https://docs.microsoft.com/en-us/dotnet/api/system.random?view=net-6.0) class. The example creates ten tasks, each of which executes asynchronously on a thread pool thread. Each task generates 10,000 random numbers, calculates their average, and updates two procedure-level variables that maintain a running total of the number of random numbers generated and their sum. After all tasks have executed, these two values are then used to calculate the overall mean.

1. What are the basic classes for working with streams in .NET?

* Stream, FileStream, MemoryStream, BufferedStream, NetworkStream, PipeStream

1. „using(….){} „using(….){} c# „using(….) c#

Cách sử dụng:

1. **using** (MyManagedClass mnObj = **new** MyManagedClass())
2. {
3. ......
4. mnObj.Use(); //use the mnObj object
5. ......
6. } //The compiler will dispose the mnObj object now   
     
     
     
   MyManagedClass mnObj =**new** MyManagedClass()
7. **using** (mnObj)
8. {
9. ......
10. mnObj.Use();//use the mnObj object
11. …………
12. }