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| DAY 17 ASSIGNMENT  BY  NANAM VAISHNAVI  15 – FEB- 2022 |

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| 1. **Research and write what is Assembly in C# ?** |
| **Ans :** |
| * An assembly is a basic building block of .NET Framework applications. * It can be .dll or .exe depending upon the project that we choose. * It is a collection of types and resources that are built to work together and form a logical unit of functionality.   **Assemblies are of two types.**  1. Private Assembly  2. Shared Assembly  **Private Assembly :** It is an assembly that is being used by a single application.  **Shared Assembly :** It can be used in more than one project. |

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| 1. **In a tabular format write the access modifiers and explain**   **(as I did in the class, create two assemblies with 3 classes in first assembles, 2 classes in other assemblies).** |

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| **Within Assembly** | | | | **Other Assembly** | |
|  | **Within class** | **Derived class** | **Other class** | **Derived class** | **Other class** |
| **Public** | YES | YES | YES | YES | YES |
| **Private** | YES | NO | NO | NO | NO |
| **Protected** | YES | YES | NO | YES | NO |
| **Internal** | YES | YES | YES | NO | NO |
| **Default** | YES | NO | NO | NO | NO |
| **Protected Internal** | YES | YES | YES | YES | NO |

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| **CODE** |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  using VaishnaviLibrary;  // \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  // Author : Nanam Vaishnavi  //Purpose : Access Modifiers  // \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  namespace VaishnaviLibrary  {  /// <summary>  /// Access Modifiers in Within Class  /// </summary>  public class MyBaseClass  {  public int a;  private int b;  protected int c;  internal int d;  int e;  protected internal int f;  public void MyBaseClassMethod()  {  a = 5;  b = 7;  c = 9;  d = 11;  e = 13;  f = 15;  }  }    /// <summary>  /// Access Modifiers in Derived Class  /// </summary>  public class MyDerivedClass : MyBaseClass  {  public void MyDerivedClassMethod()  {  a = 2;  b = 4;  c = 6;  d = 8;  e = 10;  f = 12;  }  }  /// <summary>  /// Access Modifiers in Other Class  /// </summary>  public class MyOtherClass  {  public void MyOtherClassMethod()  {  MyBaseClass mb = new MyBaseClass();  {  mb.a = 1;  mb.b = 2;  mb.c = 3;  mb.d = 4;  mb.e = 5;  mb.f = 6;  }  }    }  } |
| **OUTPUT** |
| **MyBaseClass Output MyDerivedClass** |
| **MyOtherClass** |
| **PublicLibrary** |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  using VaishnaviLibrary;  // \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  // Author : Nanam Vaishnavi  // Purpose : Other Assembly  // \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  namespace PublicLibrary  {  /// <summary>  /// derived class on other assembly  /// </summary>  public class MyPublicLibraryDerivedClass : MyBaseClass  {  public void MyDerivedClassMethod()  {  a = 2;  b = 4;  c = 6;  d = 8;  e = 10;  f = 12;  }  }  /// <summary>  /// Other Class in other Assembly  /// </summary>  public class MyPublicLibraryOtherClass : MyBaseClass  {  public void MyOtherClassMethod()  {  MyBaseClass mb = new MyBaseClass();  {  mb.a = 1;  mb.b = 2;  mb.c = 3;  mb.d = 4;  mb.e = 5;  mb.f = 6;  }  }  }  } |
| **OUTPUT** |
| **MyPublicLibraryDerivedClass**    **MyPublicLibraryOtherClass** |