Access Specifiers in C#

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
namespace ConsoleApplication3
{
    public class BaseClass
    {
        protected internal int prot_intValue = 0;
        public int publicValue = 12;
        internal int internalValue=100;
        private int privateValue=500;
        protected int protectedValue=600;
        void display()
        {
            //all are accessible
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            var baseObject = new BaseClass();
            //internalValue,publicValue,prot_intValue are accessible;
            //private and protected are not accessible
        }
    }
    class derivedsameassembly : BaseClass
    {
        void display()
        {
           //internalValue,protectedValue,publicValue are accessible;
              //prot_intValue is accessible;
           //private is not accessible

        }

    }
}
```

```
namespace oop
{
     class diffnamespace1
    {

        void display()
        {
            var baseObject = new ConsoleApplication3.BaseClass();
            baseObject.
            //internalValue,publicValue,prot_intValue are accessible;
           //protectedValue,private are not accessible
        }

    }
    class diffnamespace2:ConsoleApplication3.BaseClass
    {

        void display()
        {

            //internalValue,publicValue are accessible;
              //prot_intValue, protectedValue, are accessible;
            //private is not accessible
        }

    }

}
```

```
using System.Text;
using ConsoleApplication3;
namespace ConsoleApplication4
{
    class Program
    {
        static void Main(string[] args)
        {
            var baseObject = new BaseClass();
            baseObject.publicValue = 1000;
            //only publicValue is accessible

        }
    }
    class DerivedClass : BaseClass
    {
    void display()
    {

        var derivedObject = new DerivedClass();
        //prot_intValue,protectedValue,publicValue are accessible
        //private and internal are not accessible



    }
}
}
```

Demo C# Program

Program to check if a number is even or odd

```
using System;
public class Exercise2
{
   public static void Main()
   {
   int num1, rem1;
   Console.Write("\n\n");
   Console.Write("Check whether a number is even or odd :\n");
   Console.Write("-------------------------------------");
   Console.Write("\n\n");
   Console.Write("Input an integer : ");
   num1= Convert.ToInt32(Console.ReadLine());
   rem1 = num1 % 2;
   if (rem1 == 0)
                Console.WriteLine("{0} is an even integer.\n",num1);
   else
                Console.WriteLine("{0} is an odd integer.\n",num1);
}
}
```