Day 14 Assignment 10 Feb 2022

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| 1. Research and write what is the use of sealed class.  WACP to illustrate sealed class. |
| Use of Sealed class: |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  /\*\*\*\*\*\*\*\*\*\* Author : K. Sanjay \*\*\*\*\*\*\*\*\*\*\*/  /\*\*\*\*\*\*\*\*\*\* Purpose : Using Sealed class \*\*\*\*\*\*\*\*/  namespace Day\_14\_project\_1  {  sealed class Manager  {  public static int Emergencynumber = 108;  public string Getsecret()  {  return "1234JD";  }  }  internal class Program  {  static void Main(string[] args)  { Manager mng = new Manager();  Console.WriteLine(mng.Getsecret());  Console.ReadLine();  }  }  } |
| Output |
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| 2. Research and write what is the difference  between normal properties and auto-implemented  properties. |
| Auto-implemented Properties : The compiler creates the internal object and the accessors(get and set operations) for the auto-implemented properties so they are mutable after decleration the client code can change the values. |
| Normal Properties : Coming to this one, in properties the internal objects and accessors are up to you. |

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| WACP to illustrate normal properties |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  /\*\*\*\*\*\*\*\*\*\* Author : K. Sanjay \*\*\*\*\*\*\*\*\*\*\*/  /\*\*\*\*\*\*\*\*\*\* Purpose : Example program using Normal Properties \*\*\*\*\*\*\*\*/  namespace Day\_14\_project\_5  {  class Employee  {  private int id;  private string name;  private int salary;  public int Id  {  get  {  return id;  }  set {  id = 1111;  }  }  public string Name  {  get  {  return name;  }  Set  {  name = "John";  }  }  public int Salary  {  get  {  return salary;  }  set  {  salary = 50000;  }  }  }  internal class Program  {  static void Main(string[] args)  {  Employee emp = new Employee();  emp.Id = 111;  emp.Name = " John";  emp.Salary = 50000;  Console.WriteLine(emp.Id);  Console.WriteLine(emp.Name);  Console.WriteLine(emp.Salary);  Console.ReadLine();  }  }  } |
| Output |
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| WACP to issustrate auto-implemented properties |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  /\*\*\*\*\*\*\*\*\*\* Author : K. Sanjay \*\*\*\*\*\*\*\*\*\*\*/  /\*\*\*\*\*\*\*\*\*\* Purpose : Example program using Auto- implemented Properties \*\*\*\*\*\*\*\*/  namespace Day\_14\_\_Project\_6  {  class Employee  {  public int Id { get; set; }  public string Name { get; set; }  public int Salary { get; set; }  }  internal class Program  {  static void Main(string[] args)  {  Employee employee = new Employee();  employee.Id = 1122;  employee.Name = "John Sanjay";  employee.Salary = 80000;  Console.WriteLine(employee.Id);  Console.WriteLine(employee.Name);  Console.WriteLine(employee.Salary);  Console.ReadLine();  }  }  } |
| Output |
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| 3. Research and fix the below issue:  interface IRules  {  int Age { get; set; }  int add(int a, int b);  public void PrintHi()  {  Console.WriteLine("Hi");  }  } |
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| 4. WACP to check if the number is prime or not  using logic discussed in the class  HINT : use break; |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  /\*\*\*\*\*\*\*\*\*\* Author : K. Sanjay \*\*\*\*\*\*\*\*\*\*\*/  /\*\*\*\*\*\*\*\*\*\* Purpose : Checking prime or not using break \*\*\*\*\*\*\*\*/  namespace Day\_14\_project\_2  {  internal class Program  {  static void Main(string[] args)  {  int n = 21, i;  for (i = 2;i<n;i++)  {  if (n % i == 0)  break;  }  if(i==n)  Console.WriteLine( " It is a Prime");  else  Console.WriteLine("It is not a prime");  Console.ReadLine();  }  }  } |
| Output |
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| 5. print numbers from 1 to 30  and skip the numbers divisible by 3  HINT : use continue; |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  /\*\*\*\*\*\*\*\*\*\* Author : K. Sanjay \*\*\*\*\*\*\*\*\*\*\*/  /\*\*\*\*\*\*\*\*\*\* Purpose : Printing numbers from 1 to 30 skip numbers divisible by 3 using continue \*\*\*\*\*\*\*\*/  namespace Day\_14\_Project\_3  {  internal class Program  {  static void Main(string[] args)  {  for(int i=0;i<30;i++)  {  if (i % 3 == 0)  continue;  Console.WriteLine(i);  }  Console.ReadLine();  }  }  } |
| Output |
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| 6. Find the first number after 1000 which is  divisible by 97.  HINT : use for loop and break |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  /\*\*\*\*\*\*\*\*\*\* Author : K. Sanjay \*\*\*\*\*\*\*\*\*\*\*/  /\*\*\*\*\*\*\*\*\*\* Purpose : Printing first number after 1000 which is divisible by 97 \*\*\*\*\*\*\*\*/  namespace Day\_14\_project\_4  {  internal class Program  {  static void Main(string[] args)  {  for(int i=1000;i<=1097;i++)  {  if (i % 97 == 0)  {  Console.WriteLine(i);  break;  }  }  Console.ReadLine();  }  }  } |
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