1) Which of the following will allow you to determine type of object at run time?

CLR

CLS

CTS

DLR

2) Code that targets the CLR is called as -----------.

.NET Code

CSharp Code

Managed Code

Unmanaged Code

3) Identify the .NET Framework 4.5 Core Enhancements.

Easier Asynchronous Programming

Type Safety

Security

NuGet- A preferred distribution and update mechanism

4) Which of the following statements are true about the assembly?

Assembly is .NET's unit of deployment.

Assembly is always a file with .dll extension.

Multiple versions of .NET assembly can execute simultaneously.

.NET application can generate either exe or dll and there is nothing like assembly in .NET.

5) ------class is the root of the .NET inheritance hierarchy.

System

int

String

Object

Password for crossword: Ncd#1

|  |  |
| --- | --- |
| **Across** | **Down** |
| **2.** This class is root of the .NET inheritance hierarchy | **1.** .NET Framework 4.5 Core Enhancement. |
| **3.** Code that targets the CLR | **4.** Allows you to determine type of object at run time |
| **5.** Simultaneous(side by side) execution |  |

Day 2:

structs EnablePrimitiveDatatypesToBecomeObjects

referencetypes InitializedToNullByCompiler

long 8Bytes

valuetypes AssignedAsCopies

implicitlytypedlocalvariable CannotBeInitializedToNull

nullabletype ValueTypeWithAdditionalNullValue

staticconstructor MustNotHaveAccessModifier

refparameter ActsAsInputAndOutput

AutoImplementedProperties BothGetAndSetAccessors

base accesstobaseclassmembers

AbstractClass CannotbeSealed

Password for crossword: Ncd#2

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| **Across** | **Down** |
| **2.** Enable primitive data types To become objects | **1.** Which constructor cannot have an access modifier? |
| **4.** Value Type With Additional Null Value | **3.** Must have both get and set accessors |
| **5.** This type of variable cannot be initialized to null | **6.** This class cannot act as a sealed class. |
| **10.** Acts As Both Input And Output parameter. | **7.** Assigned as copies |
| **11.** Size of long data type | **9.** Which keyword provides access to base class  instance members? |

Day 3:

SealedClass Class that cannot be inherited

PureProtocols Interfaces

Struct No default constructor

ExtensionMethod Allows addition of methods to an existing class without inheritance or recompilation

AnonymousType Name of the type is automatically generated by compiler

PartialType Allows separation of machine generated and user written code

Finally This block will contain cleanup which will execute whether or not exception occurs

ApplicationException Class from which user defined exceptions inherit

Exception This class should be used in last catch statement when there are multiple catch statements.

BaseClass What should be declared first in the list when a class base list contains base class and interfaces?

Password for crossword: Ncd#3

**Across**

**3.** Interfaces

**5.** Allows addition of methods to an existing class without inheritance or recompilation

**8.** This class should be used in last catch statement when there are multiple catch statements.

**9.** Class that cannot be inherited

**10.** This block will contain cleanup which will execute whether or not exception occurs

**Down**

**1.** What should be declared first in the list when a class base list contains base class and interfaces?

**2.** Class from which user defined exceptions inherit

**4.** Name of the type is automatically generated by compiler

**6.** No default constructor

**7.** Allows separation of machine generated and user written code

Day 04:

IEnumerable Using this loop allows contents of a collection to be obtained by a foreach loop.

Hashtable Stores data in key value format and provides a faster way of storage and retrieval of items.

Queue Data structure that provides fist in first out collection of items.

Object Non generic collections use this type to store data of any data type.

IEnumerator Return type of GetEnumerator() method.

ArrayList Collection class equivalent of 1-D array.

Generics They provide type safety and help us avoid type casting errors that may occur at run time.

GenericConstraints They will allow generic class to implement some interface.

Iterator Method, get accessor or operator that enables you to support foreach iteration in a class or struct without having to implement the entire IEnumerable interface.

yieldreturn Statement used by iterator to return each element in the collection.

Password: Ncd#4

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| **Across** | **Down** |
| Using this loop allows contents of a collection to be  obtained by a foreach loop. | They will allow generic class to implement some  interface. |
| Method, get accessor or operator that enables you to  support foreach iteration in a class or struct without  having to implement the entire IEnumerable interface. | Stores data in key value format and provides a faster  way of storage and retrieval of items. |
| Return type of GetEnumerator() method. | Non generic collections use this type to store data of  any data type. |
| They provide type safety and help us avoid type  casting errors that may occur at run time. | Collection class equivalent of 1-D array. |
| Statement used by iterator to return each element in  the collection. | Data structure that provides fist in first out collection of  items. |

Day 5:

Delegate A type-safe object that points to another method(s) in the application, which can be invoked at a later time.

Multicast Type of a delegate which can invoke more than one methods at a time wherein all methods must return void.

Generic Type of a delegate where type parameter is specified after delegate's name.

Publisher The class which raises an event.

Subscriber The class which handles an event.

EventArgs The type of second parameter of event handler which contains other information required by the handler.

AnonymousMethod A block of code that is passed to a delegate.

delegate Anonymous methods are declared using this keyword.

LambdaExpressions More concise way of writing anonymous methods.

inferred Lambda expressions permit parameter types to be

Password: Ncd#5

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| **Across** | **Down** |
| Lambda expressions permit parameter types to be | Type of a delegate which can invoke more than one  methods at a time wherein all methods must return void. |
| More concise way of writing anonymous methods. | The class which raises an event. |
| Type of a delegate where type parameter is specified  after delegate's name. | A block of code that is passed to a delegate. |
| The type of second parameter of event handler which  contains other information required by the handler. | The class which handles an event. |
| A type-safe object that points to another method(s) in  the application, which can be invoked at a later time. | Anonymous methods are declared using this keyword. |

Day 06:

Finalization Process of converting object back to raw heap memory while destroying that object.

Destructor The C# compiler will automatically convert this into an override of Object.Finalize().

Dispose This method is used to explicitly release the unmanaged resources like windows handles or file streams.

Streams Provide a way to write and read bytes to and from a backing store that can be one of several storage mediums.

Path This class provides methods and properties for processing directory strings in a cross-platform manner.

StringReader This class is used to manipulate the strings. This class provides methods to read parts of the string.

FileInfo You should use this class when you want to perform multiple operations on file.

FileSystemInfo This class class contains methods that are common to file and directory manipulation and is a base class for FileInfo and DirectoryInfo class.

OnDeserialization This method of IDeserializationCallback interface will enable your class to initialize a nonserialized member automatically.

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| --- | --- |
| **Across** | **Down** |
| Provide a way to write and read bytes to and from a  backing store that can be one of several storage  mediums. | The C# compiler will automatically convert this into an  override of Object.Finalize(). |
| This method is used to explicitly release the  unmanaged resources like windows handles or file  streams. | This method of IDeserializationCallback interface will  enable your class to initialize a nonserialized member  automatically. |
| This class is primarily used for serialization through  firewalls or among diverse systems. | This class is used to manipulate the strings. This class  provides methods to read parts of the string. |
| This class class contains methods that are common to  file and directory manipulation and is a base class for  FileInfo and DirectoryInfo class. | You should use this class when you want to perform  multiple operations on file. |
| Process of converting object back to raw heap  memory while destroying that object. | This class provides methods and properties for  processing directory strings in a cross-platform manner. |

Password: Ncd#6

Day07:

Private These assemblies must be located within the main directory of the owing application.

Manifest Contains information about identity of an assembly like name and version no of an assembly.

One If 10 .NET applications are referring a shared assembly and those 10 applications are running simultaneously, how many copies of the assembly will exist in memory?

Resources Part of assembly used to store sound and picture files in a project.

Intellisense This feature of visual studio is an example of reflection.

Invoke This member of MethodInfo class is used to call the method dynamically using reflection.

BindingFlags This enumeration is used to control the way in which the search for members and types is conducted by reflection.

GetType This method is used to load the class in memory so that you can obtain information about its members.

Attribute It is an instruction meant for the runtime. The runtime can change its behavior or course of action based on the presence of this instruction.

AttributeTargets This enumeration specifies the application elements on which it is valid to apply an attribute.

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| **Across** | **Down** |
| If 10 .NET applications are referring a shared  assembly and those 10 applications are running  simultaneously, how many copies of the assembly will  exist in memory? | This enumeration is used to control the way in which  the search for members and types is conducted by  reflection. |
| This enumeration specifies the application elements  on which it is valid to apply an attribute. | These assemblies must be located within the main  directory of the owing application. |
| This method is used to load the class in memory so  that you can obtain information about its members. | It is an instruction meant for the runtime. The runtime  can change its behavior or course of action based on the  presence of this instruction. |
| Contains information about identity of an assembly  like name and version no of an assembly. | This feature of visual studio is an example of  reflection. |
| Part of assembly used to store sound and picture  files in a project. | This member of MethodInfo class is used to call the  method dynamically using reflection. |

Password: Ncd#7

Day 7- Set 2

metadata This part of assembly will contain attributes applied to program elements.

OptionalParameters They allow you to omit arguments in method invocation.

NamedArguments They act as an in-code documentation to help you remember which parameter is which.

dynamic This keyword allows C# compiler to defer its job of resolving type/method names till runtime.

DLR The infrastructure that supports dynamic operations.

|  |  |
| --- | --- |
| **Across** | **Down** |
| They act as an in-code documentation to help you  remember which parameter is which. | This keyword allows C# compiler to defer its job of  resolving type/method names till runtime. |
| This part of assembly will contain attributes applied to  program elements. | They allow you to omit arguments in method  invocation. |
|  | The infrastructure that supports dynamic operations. |

Password: Ncd#7

Day 8 Set 1

out For generic type parameters, this keyword specifies that the type parameter is covariant.

in For generic type parameters, this keyword specifies that the type parameter is contravariant.

Covariance Only applies when there is a reference conversion between type arguments.

Missing This keyword is used to obtain default value of a parameter.

Parallel Multiple simultaneous computations

DataParallelism Dividing the data across multiple processors for parallel execution.

TPL This is used to support task parallelism in .NET.

PLINQ Process of executing LINQ queries in parallel.

async This modifier reduces developer’s efforts for writing an additional code for keeping user interface responsive.

await Async method without this operator runs synchronously.

|  |  |
| --- | --- |
| **Across** | **Down** |
| Async method without this operator runs  synchronously. | Dividing the data across multiple processors for  parallel execution. |
| Multiple simultaneous computations | This is used to support task parallelism in .NET. |
| For generic type parameters, this keyword specifies  that the type parameter is contravariant. | This modifier reduces developer’s efforts for writing an  additional code for keeping user interface responsive. |
| Only applies when there is a reference conversion  between type arguments. | For generic type parameters, this keyword specifies  that the type parameter is covariant. |
| This keyword is used to obtain default value of a  parameter. | Process of executing LINQ queries in parallel. |

Password: Ncd#8