C# Programming Language- CsharpChecklist

Sno. Topic

1 About C# Programming Language like history and type and purpose and features? What is OOPS?

2 What is .NET Framework ? What are compilers ? Difference between Compiler and Interpreter ?

3 Classes in C# ? Class name Conventions ? Types of classes like partial , non static and static ?

4 Escape Sequences?

5 Basic Structure of C# Program like Main( ) Method usage ? Explaining Commad Line Arguments .

6 What are namespaces ?

7 What is the difference between classes and namespaces?

8 What is the process of compiling of C# source code ? Explaining CLR , CLS and CTS ? Explaining Language Interoperability ?

9 reading and Writing the text files by using FileStream class,StreamReader and StreamWriter.

10 What is JIT Compiler ?

11 What is Assembly ? Types of Assembly ?

12 What is Object ?

13 What is the base class of all classes in the .NET Framework?

14 Explain the .NET Architecture ?

15 Latest .NET Framework and Latest C# languages ? How many .Net based languages available ?

16 What are Variables? Variable Naming Conventions ? Declaring and Initializing Variables ?

17 What are Data Types ? Types of Data types ?

18 Difference between Value type and reference type data types?

19 Difference between dynamic and var type variables ?

20 Difference between variables and constants ?

21 Difference between constants and read only fields?

22 Console.ReadLine() and Console.WriteLine() Functionality ?

23 What is using Keyword ?

24 What are comments in C# ? Types of Comments ?

25 Instantiating Class and its process?

26 What are operators and Operands ? Types of Operators ? Conversions and Castings ? Boxing and Unboxing ?

27 Explain Arithmetic , Arithmetic assignment , Unary , Comparison and Logical Operators ?

28 Explaining Conditional Constructs like if-else , nested if-else and switch case ?

29 Explain Loops like While , do while , For loop and foreach loop ?

30 Explaining Jump Statemenst like Goto , break ,continue statement as well as return keyword .

31 What are the class members ?

32 What are access specifiers ? How may access specifiers are there ?

33 What are methods and convention for methods naming?

34 Explain the importance of Parameterized Methods ?

35 Explain call by value , call by reference and call by output ?

36 Explain Optional and Named Arguments ?

37 Explain Recursion ? And it's advantages?

38 Explain static attributes,static methods and static class?

39 Explaining Constructors ? Types of Constructors like static,private and instance ? Constructors with parameter ?

40 Explaining Destructors ?

41 Explain the Garbage Collection and it's Process and working ?

42 Explain the Finalize() and Dispose() methods in Garbage Collection class?

43 Explain Properties in C#?

44 Explaining Structure ? Difference between Structure and Class?

45 Explaining Enumerations and it's usage with examples?

46 Explaining Array and it's Implementation in one dimensional and two dimensional ? Copying array ?

47 Explain the Param Arrays and Jagged Array? Passing array as parameters ? Passing array by ref keyword ?

48 Explaining Array Class with it's properties like Length,Rank etc and also methods like Sort, Clear and GetLength ?

49 Explain the Collections ?

50 Explain the Generic Class in C# ? Advantage of Generic Class?

51 Explain the types of Collections like generic and non generic ?

52 Explain the working of ArrayList , List,Stack,Queue and Dictionary collections with generic and non generic ?

53 Explain Inheritance and implementation ?

54 Explain abstract class and abstract methods ?

55 Explain the sealed classes?

56 Explain the interfaces ?

57 Explain base class initialization ?

58 What is Polymorphism?

59 Implementing function overloading, operator overloading and constructor overloading ?

60 Implementing function overriding ?

61 Reading and writing the text file by using File class?

62 Reading and Writing the text files by using FileStream class,StreamReader and StreamWriter.

63 Creating Directory and Creating files by using DirectoryInfo and FileInfo classes.

64 Fetching Directory and File details by using DirectoryInfo and FileInfo classes.

65 Exception handling by using try,catch and finally .

66 System Exceptions and Application Exceptions handling .

67 Creating application exception and throwing it.

68 Threads in C# like single thread and multi thread ?

69 Creating single thread and multi thread ?

70 Implementing Thread methods like Start(),Sleep(0,Abort() .

71 What is Thread Life Cycle ?

72 Synchronizing threads ?

73 Explaining Delegates ? Types of Delegates ?

74 Working with Events in C#?

75 What are attribute and reflections in C#?