

1) C# Basics MCQs

1. C# is a programming language, developed by ____.

- A. Oracle
- B. Microsoft
- C. GNU project
- D. Google

Answer: B) Microsoft

Explanation:

C# is a programming language, developed by Microsoft.

[Discuss this Question](#)

2. C# runs on the ____.

- A. .NET Framework B. Java Virtual Machine
- C. Both A. and B.
- D. None of the above

Answer: A) .NET Framework

Explanation:
C# runs on the .NET Framework.

[Discuss this Question](#)

3. C# programming language is used to develop -

- A. Web apps
- B. Desktop apps
- C. Mobiles apps
- D. All of the above

Answer: D) All of the above

Explanation:

C# programming language is used to develop the web apps, desktop apps, mobile apps, games and much more.

[Discuss this Question](#)

4. Is C# an object-oriented programming language?

- A. Yes
- B. No

Answer: A) Yes

Explanation:

Yes, C# is an object-oriented programming language.

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5. Is C++ an alias of C#?

- A. Yes
- B. No **Answer:** B) No

Explanation:

No, C++ is not an alias of C#.

[Discuss this Question](#)

6. What is the extension of a C# language file?

- A. .c
- B. .cpp
- C. .cs
- D. .csp

Answer: C) .cs

Explanation:

The C# file is saved with ".cs" extension.

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7. Who is the founder of C# programming language?

- A. Anders Hejlsberg
- B. Douglas Crockford
- C. Rasmus Lerdorf
- D. Brendan Eich **Answer:** A) Anders Hejlsberg

Explanation:

C# programming language is developed by Anders Hejlsberg.

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8. Is C# a type safe programming language?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Yes, C# is a type safe programming language, the C# type safe code can only access the memory location that it has permission to execute. Therefore, it improves a security of the program.

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9. Is C# a structured programming language?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Yes, C# is a structured programming language that means we can break the program into parts using functions. So, it is easy to understand and modify.

[Discuss this Question](#)

10. CLR stands for ____.

- A. Common Type System
- B. Common Language Specification
- C. Common Language Runtime
- D. Java Virtual Machine

Answer: C) Common Language Runtime

Explanation:

CLR stands for Common Language Runtime.

[Discuss this Question](#)

11. .Net CLR is equivalent to?

- A. Common Type System
- B. Common Language Specification
- C. Common Language Runtime
- D. Java Virtual Machine **Answer:** D) Java Virtual Machine

Explanation:

.NET CLR is equivalent to JVM (Java Virtual Machine).

[Discuss this Question](#)

12. What is CLR in C#?

- A. It is a virtual machine component of Microsoft .NET Framework
- B. It is a virtual machine component of JVM
- C. It is a compiler to compile the C# code
- D. All of the above

Answer: A) It is a virtual machine component of Microsoft .NET Framework

Explanation:

CLR is a virtual machine component of Microsoft .NET Framework.

[Discuss this Question](#)

13. What does the CLR in C# do?

- A. Manages the execution of Webpages programs
- B. Manages the parsing of the various types
- C. Manages the execution of .NET programs
- D. All of the above

Answer: C) Manages the execution of .NET programs

Explanation:

The CLR is used to manage the execution of .NET programs.

[Discuss this Question](#)

14. SOAP in C# stands for ____.

- A. Simple Object Access Protocol
 - B. Simple Object Access Program
 - C. Standard Object Access Protocol
 - D. Standard Object Access Program
- Answer:** A) Simple Object Access

Protocol

Explanation:

In C# programming, the SOAP stands for Simple Object Access Protocol.

[Discuss this Question](#)

15. "Garbage collection automatically reclaims memory occupied by unreachable unused objects." – This statement is true or false in C#?

- A. True
- B. False

Answer: A) True

Explanation:

In C#, this following statement is true.

"Garbage collection automatically reclaims memory occupied by unreachable unused objects."

[Discuss this Question](#)

16. Which symbols are used to mark the beginning and end of a code block?

- A. Square brackets []
- B. Curly braces {}
- C. Round brackets ()
- D. Double-quotes "" **Answer:** B) Curly braces {}

Explanation:

C# code block begins and ends by the Curly braces {}.

[Discuss this Question](#)

17. Every C# statement is terminated by ____.

- A. Colon (:)
- B. Semicolon (;)
- C. Comma (,)
- D. Dot (.)

Answer: B) Semicolon (;)

Explanation:

Every C# statement is terminated by semicolon (;).

[Discuss this Question](#)

18. Is C# programming language a case-sensitive?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Yes, C# programming language is a case-sensitive.

[Discuss this Question](#)

19. In C#, a single-line comment starts with ____.

- A. Two forward slashes (//)
- B. Two backward slashes (\\)
- C. A hash character (#)
- D. A dollar character (\$) **Answer:** A) Two forward slashes (//)

Explanation:

In C#, a single-line comment starts with two forward slashes (//).

[Discuss this Question](#)

20. In C#, the multi-line comments placed within the ____.

- A. // and //
- B. \\ and //
- C. <!-- and -->
- D. /* and */ **Answer:** D) /* and */

Explanation:

In C#, the multi-line comments placed within the /* and */.

[Discuss this Question](#)

2) C# Variables and Data Types MCQs

21. What is the correct syntax to declare a variable in C#?

- A. type variableName = value;
- B. type variableName;
- C. variableName as type = value;
- D. Both A. and B.

Answer: D) Both A. and B.

Explanation:

The both of the above syntaxes can be used to declare a variable:

```
type variableName = value; • - It defines the type and assigns the value
type variableName; • - It defines the type only
```

[Discuss this Question](#)

22. Which data type is used to store text value in C#?

- A. text
- B. txt
- C. string
- D. str

Answer: C) string

Explanation:

The `string` data type is used to store text value in C#.

[Discuss this Question](#)

23. Which C# keyword is used to define a constant?

- A. define
- B. fixed
- C. constant
- D. const

Answer: D) const

Explanation:

The `const` is used to define a constant in C#.

[Discuss this Question](#)

24. What is the correct syntax to define a C# constant?

- A. `const type constant_name;`
- B. `const type constant_name = value;`
- C. `const constant_name as type;`
- D. `const constant_name as type = value;` **Answer:** B) `const type constant_name = value;` **Explanation:**

The correct syntax to define a C# constant is:

```
const type constant_name = value;
```

Note: A `const` field requires a value to be provided.

[Discuss this Question](#)

25. Which is not a valid C# data type?

- A. long B. int
- C. float
- D. complex

Answer: D) complex

Explanation:

There is no `complex` type in C#.

[Discuss this Question](#)

26. Which is the correct order for implicit type conversion to convert a smaller to a larger type in C#?

- A. char -> int -> long -> float -> double
- B. bool -> char -> int -> long -> float -> double
- C. char -> int -> float -> long -> double
- D. bool -> char -> int -> long -> double -> float

Answer:

A) char -> int -> long -> float -> double

Explanation:

The implicit type conversion is done in the following order: char -> int -> long -> float -> double.

[Discuss this Question](#)

27. Which is the correct order for explicit type conversion to convert a larger to a smaller type in C#?

- A. double -> float -> long -> int -> char -> bool
- B. double -> float -> long -> int -> char
- C. float -> double -> long -> int -> char
- D. float -> double -> long -> int -> char -> bool

Answer: B) double -> float -> long -> int -> char

Explanation:

The explicit type conversion is done in the following order: double -> float -> long -> int -> char.

[Discuss this Question](#)

28. Which is the correct C# statement to convert a float value to int explicitly?

- A. int_variable = (int) float_variable;
- B. int_variable = float_variable;
- C. int_variable = (int) (float_variable);
- D. int_variable = int *float_variable);

Answer: A) int_variable = (int) float_variable;

Explanation:

The following syntax is used to convert a float value to int explicitly:

```
int_variable = (int) float_variable;
```

[Discuss this Question](#)

29. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
bool x = true;
        Console.WriteLine(Convert.ToString(x));
    }
}
}
```

- A. True
- B. true
- C. False
- D. false

Answer: A) True

Explanation:

In the above C# code, we are using `Convert.ToString()` method which converts bool to string. Thus, the output will be "True".

[Discuss this Question](#)

30. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
double x = 10.25;
        Console.Write(Convert.ToInt32(x));
    }
}
}
```

- A. 10.30
- B. 10.25
- C. 10
- D. Error

Answer: C) 10

Explanation:

In the above C# code, we are using `Convert.ToInt32()` method which converts double to int. Thus, the output will be "10".

[Discuss this Question](#)

3) C# Input/Output MCQs

31. What is 'Console' in C#?

- A. Class
- B. Object
- C. Method
- D. Structure **Answer:** A) Class

Explanation:

In C#, the `Console` class is used to represent the standard input, output, and error streams for the console applications.

[Discuss this Question](#)

32. What will be the output of the following C# code, if the input is 123?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
        Console.WriteLine( "Enter a number:" );
        int num = Console.ReadLine();
        Console.WriteLine( "Given number is: " + num);
    }
}
}
```

- A. Given number is:123
- B. Given number is: 123
- C. Given number is: "123"
- D. Error

Answer: D) Error

Explanation:

In C#, `Console.ReadLine()` is used to read the string and here we are trying to input an integer value. Thus, the output will be an error.

```
Cannot implicitly convert type `string' to `int'
```

[Discuss this Question](#)

33. What will be the output of the following C# code, if the input is 123?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
        Console.WriteLine( "Enter a number:" );
        int num =
            "Given number is: "
Convert.ToInt32(Console.ReadLine());
        Console.WriteLine(
            + num);
    }
}
}
```

- A. Given number is:123
- B. Given number is: 123

- C. Given number is: "123"
- D. Error

Answer: B) Given number is: 123

Explanation:

In C#, `Console.ReadLine()` is used to read the string and here the input is 123 and converting it into an integer. This, there will not be an error.

Output will be: Given number is: 123

[Discuss this Question](#)

34. Which is/are the correct method(s) to input a float value in C#?

- A. `Parse(Console.ReadLine())`
 - B. `ToSingle(Console.ReadLine())`
 - C. `ToFile(Console.ReadLine());`
 - D. Both A and B
 - E. Both A and C
- Answer:** B) Both A and B

Explanation:

In C#, the following methods can be used to input a float value:

```
float.Parse(Console.ReadLine());  
Convert.ToSingle(Console.ReadLine());
```

[Discuss this Question](#)

35. What is the difference between `Console.Write()` and `Console.WriteLine()` methods in C#?

- A. `Write()` writes a single character while `Console.WriteLine()` writes a complete line
- B. `Write()` writes the data on the console without printing a newline while `Console.WriteLine()` writes the data on the console along with printing a newline
- C. `ToFile(Console.ReadLine());`

- D. Write() writes the string on the console while Console.WriteLine() writes the string as well as values of the variables on the console
- E. Both can be used for the same purpose

Answer: B) Write() writes the data on the console without printing a newline while Console.WriteLine() writes the data on the console along with printing a newline

Explanation:

The only difference between the `Console.Write()` and `Console.WriteLine()` is that the `Console.Write()` is used to write data without printing the new line, while `Console.WriteLine()` is used to write data along with printing the new line.

[Discuss this Question](#)

36. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
int a = 10, b = 20;
        Console.WriteLine("{0},{0}"a, b);
    }
}
}
```

- A. 10,10 B. 10,20
- C. 20,20
- D. Error

Answer: A) 10,10

Explanation:

In the above code, there are two variables `a` and `b`, but while printing the values of `a` and `b`, we are using the same placeholder `{0}`, that will print the value of the first variable. Thus, the output is 10,10.

[Discuss this Question](#)

37. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
int a = 10, b = 20;
        Console.WriteLine("{0}+{1}", a, b);
    }
}
}
```

- A. 20
- B. 30
- C. 10+20
- D. 10+10

Answer: C) 10+20

Explanation:

In the statement, `Console.WriteLine("{0}+{1}", a, b);` - `{0}` is the placeholder for variable `a` and `{1}` is the placeholder for variable `b`, `{0}+{1}` will not perform any operation, values of `a` and `b` will be printed at the place of `{0}` and `{1}`. Thus, the output will be 10+20.

[Discuss this Question](#)

4) C# Conditional and Control Statements MCQs

38. What will be the output of the following C# code?

```
using System;

class Program {
    static void Main(string[] args) {
int i = 2;    int j = 10 / 4;

        if (i == j) {
            Console.WriteLine("True");
        } else {
            Console.WriteLine("False");
        }
    }
}
```

- A. True

- B. False
- C. Error
- D. None

Answer: A) True

Explanation:

The statement `int j = 10/4;` The value of `j` will be 2 because of implicit type casting. Thus, the output will be "True".

[Discuss this Question](#)

39. What will be the output of the following C# code?

```
using System;

class Program {
    static void Main(string[] args) {        Console.WriteLine(true
^ true);
    }
}
```

- A. True
- B. False
- C. Error
- D. None

Answer: B) False

Explanation:

Here, we are using the Logical exclusive OR operator `^` (XOR). It returns true when one operand evaluates to true and another operand evaluates to false. In the above code, both of the operands are true. Thus, the output will be False.

[Discuss this Question](#)

40. What will be the output of the following C# code?

```
using System;
```

```
class Program {
    static void Main(string[] args) {
        Console.WriteLine(true && false);
    }
}
```

- A. True
- B. False
- C. Error
- D. None

Answer: B) False

Explanation:

Here, we are using the Conditional logical AND operator (&&). It returns true if both of the operands evaluate to true. In the above code, the operands are true, false. Thus, the output will be "False".

[Discuss this Question](#)

41. What is the correct syntax for do while loop in C#?

- A. `do; {`
- B. `statement(s);`
- C. `} while (test_condition);`

D.

- E. `do`
- F. `{`
- G. `statement(s);`
- H. `} while (test_condition)`

I.

- J. `do(test_condition) {`
- K. `statement(s);`
- L. `}while;`

M.

- N. `do {`
- O. `statement(s);`

```
P. } while (test_condition);
```

Q.

Answer: D)

```
do { statement(s);  
} while (test_condition);
```

Explanation:

The correct syntax of **do...while** statement is:

```
do { statement(s);  
} while (test_condition);
```

[Discuss this Question](#)

42. Does C# support foreach loop?

- A. Yes
- B. No **Answer:** A) Yes **Explanation:**

Yes, C# supports **foreach** loop. The **foreach** loop is used to iterate over the elements of the collection. The collection may be an array or a list.

Example:

```

using System; class
Program {
    static void Main(string[] args) {
        // an array
        int[] arr = new int[] {10, 20, 30, 40, 50};

        foreach(int elements in arr) {
            Console.WriteLine(elements);
        }
    }
}
/*
Output:
10
20
30
40
50
*/

```

[Discuss this Question](#)

43. What is the correct syntax for foreach statement in C#?

- A. `foreach`(type variable_name `in` collection_name); {
- B. statement(s);
- C. }

D.

- E. `foreach`(type variable_name `in` collection_name) {
- F. statement(s);
- G. }

H.

- I. `foreach`(variable_name As Type `in` collection_name){
- J. statement(s);
- K. }

L.

- M. `foreach`(dim type variable_name `in` collection_name) {
- N. statement(s);
- O. }

P.

Answer: B)

```
foreach(type variable_name in collection_name) {  
statement(s); }
```

Explanation:

The correct syntax of `foreach` statement is:

```
foreach(type variable_name in collection_name) {  
statement(s);  
}
```

[Discuss this Question](#)

44. What will be the output of the following C# code?

```
using System;  
  
class Program {  
    static void Main(string[] args) {  
        int i = 100;  
  
        do {  
            Console.Write(i + " " );  
            ++i;  
        } while (i <= 50);  
    }  
}
```

- A. Error
- B. 100 101 102 ... Infinite
- C. 101
- D. 100 **Answer: D) 100**

Explanation:

The do-while loop is an exit control loop where the condition is checked after executing the loop body. In the above code, the condition is false still loop body will be executed first. Thus, the output will be 100.

[Discuss this Question](#)

45. What will be the output of the following C# code?

```
using System;

class Program {    public static void Main() {        int i =
10;
        Console.WriteLine(i++);
    }
}
```

- A. 10 B. 11
- C. 12
- D. Error

Answer: A) 10

Explanation:

The statement `i++` is a post-increment operation, and it increases the value of `i` `Console.WriteLine()` after evaluating the statement. Thus, 10 will be printed.

[Discuss this Question](#)

46. Which is the correct for() statement to run an infinite loop?

- A. `for(;;)`
- B. `for(;;);`
- C. `for(;;)`
- D. `for(1;1;1)` **Answer:** A) `for(;;)`

Explanation:

The correct `for` statement/loop to run an infinite loop is:

```
for(;;)
```

[Discuss this Question](#)

47. Can we obtain the array index using foreach loop in C#?

- A. Yes
- B. No **Answer:** B) No

Explanation:

No, we cannot obtain the array index using [foreach loop](#) because it does not keep track of the index, it only iterates forward over the array in single steps.

[Discuss this Question](#)

48. Does C# support goto statement?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Yes, C# supports the `goto` statement. The `goto` statement transfers the control of the program to the specified label and the label is the valid identifier and placed just before the statement from where the control is transferred.

Example:

```
using System;

class Program {
    public static void Main() {
        Console.WriteLine( "In the main..." );
        int i = 1;

        okay:
            Console.Write(i + " " );
            if (++i <= 10) {
                goto okay;
            }

    }
}

/*
Output:
In the main...
1 2 3 4 5 6 7 8 9 10
*/
```

[Discuss this Question](#)

49. What is the use of 'throw' statement in C#?

- A. to return from the calling functions to called function
- B. to throw an exception manually during the execution of the program
- C. to return from the switch statement
- D. None of the above

Answer: B) to throw an exception manually during the execution of the program

Explanation:

The C# **throw** statement is used to throw an exception manually during the execution of the program.

[Discuss this Question](#)

50. Which C# keyword is used to coming out from the loop?

- A. break
- B. continue
- C. Both A and B
- D. None of the above **Answer:** A) break

Explanation:

The C# **break** keyword breaks the execution of the loop and sends the program's control to the next statement written after the loop.

[Discuss this Question](#)

5) C# Strings MCQs

51. What is String in C# meant for?

- A. A variable
- B. A Class
- C. An Array
- D. An object **Answer:** D) An object

Explanation:

In C#, `String` is an object of `System.String` class.

[Discuss this Question](#)

52. Can we use == operator to compare two strings?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Two strings can be compared by using the == Operator.

[Discuss this Question](#)

53. Which is the base class of the String() Constructor?

- A. String
- B. System.IO.String
- C. System.Strings
- D. System.String

Answer: D) System.String

Explanation:

In C#, `System.String` is a base class for all String related methods, properties, constructors, and operators.

[Discuss this Question](#)

54. Which String class operator is used to determine whether two specified strings have different values?

- A. !=
- B. !
- C. ~

D. ~ **Answer:** A) !=

Explanation:

In C#, the inequality operator (!=) can be used to determine whether two specified strings have different values.

Syntax of inequality operators is:

```
public static bool operator != (string? a, string? b);
```

[Discuss this Question](#)

55. Except == operator, which methods can be used to compare two strings?

- A. Equal()
- B. Compare()
- C. Both A and B
- D. None of these **Answer:** C) Both A and B

Explanation:

The `Equal()` and `Compare()` methods can also be used to compare two strings in C#.

[Discuss this Question](#)

56. Which is the correct method to convert given string in uppercase?

- A. Upper()
- B. ToUpper()
- C. Upr()
- D. ToUpr()

Answer: B) ToUpper()

Explanation:

The `ToUpper()` method is used to convert the given string into the uppercase.

Example:

```
using System;

class Program {
    public static void Main() {
        string str = ; "includehelp"
        Console.WriteLine(str.ToUpper());
    }
}
```

[Discuss this Question](#)

57. What is String.Length in C#?

- A. Property
- B. Method
- C. Constructor
- D. Both A and B **Answer:** A) Property

Explanation:

The **String.Length** is property of **System.String** class that is used to get the number of characters in the current String object.

Syntax of **String.Length** property is:

```
public int Length { get; }
```

[Discuss this Question](#)

58. What will be the output of the following C# code?

```
using System;

class Program {
    static void Main(string[] args) {
        String s1 = "Hello";
        String s2 = ; "IncludeHelp"
        String s3 = s1;
        Console.WriteLine(s1.Equals(s3) + " " + s2.CompareTo(s1));
    }
}
```

- A. Error
- B. True True

- C. True False
- D. True 1

Answer: D) True 1

Explanation:

The `Equals()` method returns a bool value. We assigned `s1` to `s3`. Thus, the statement `s1.Equals(s3)` will return "True". And, the `CompareTo()` method returns an int value (Less than 0, 0, or greater than 0). The statement `s2.CompareTo(s1)` will return 1 because this instance (`s2`) follows `s1`.

[Discuss this Question](#)

59. What will be the output of the following C# code?

```
using System;

class Program {
    static void Main(string[] args) {
        String str = "Hello";
        Console.WriteLine(str.Length);
    }
}
```

- A. 5 B. 6 C. 7
- D. 4 **Answer:**

A) 5

Explanation:

The `String.Length` returns the length of the string. Thus, the output will be 5.

[Discuss this Question](#)

60. What will be the output of the following C# code?

```
using System;

class Program {
    static void Main(string[] args) {
        String str = "Hello"
        Console.WriteLine(str.IndexOf('h'));
    }
}
```

- A. 0
- B. 1
- C. -1
- D. Error

Answer: C) -1

Explanation:

The `IndexOf()` method returns the index of a given character, and it returns -1 if the given character is not found in the string. Here, we are trying to get the index of 'h' which is not present in the string. Thus, the output will be -1.

[Discuss this Question](#)

6) C# Arrays MCQs

61. To declare an array, define the variable type with ____.

- A. Square brackets []
- B. Curly brackets {}
- C. Round brackets ()
- D. None of the above **Answer:** A) Square brackets []

Explanation:

To declare an array, define the variable type with square brackets [].

[Discuss this Question](#)

62. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void
Main(string[] args) {        "iPhone", "Samsung", "Vivo"
    string[] mobiles = {
        Console.WriteLine(mobiles);
    }
}
}
```

- A. "iPhone", "Samsung", "Vivo"
- B. {"iPhone", "Samsung", "Vivo"}
- C. string[]
- D. System.String[] **Answer: D) System.String[]**

Explanation:

In the above code, the statement `Console.WriteLine(mobiles);` will print the type of the variable that is `System.String[]`.

[Discuss this Question](#)

63. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void
Main(string[] args) {        "iPhone", "Samsung", "Vivo"
    string[] mobiles =
        Console.WriteLine(mobiles[-1]);
    }
}
}
```

- A. None
- B. Warning
- C. Exception
- D. System.String[] **Answer: C) Exception**

Explanation:

The array index starts from 0 in C#, in the above code – we are trying to get the element with index -1. Thus, there will be an exception

"System.IndexOutOfRangeException: Index was outside the bounds of the array."

[Discuss this Question](#)

64. Which statement is correct about the following C# statement?

```
int[] x= {10, 20, 30};
```

- A. 'x' is a reference to the array created on stack
- B. 'x' is a reference to an object created on stack
- C. 'x' is a reference to an object of a 'System.Array' class
- D. None of the above

Answer: C) 'x' is a reference to an object of a 'System.Array' class

Explanation:

In the above given C# statement, the variable 'x' is a reference to an object of a 'System.Array' class.

[Discuss this Question](#)

65. Which array property is used to get the total number of elements in C#?

- A. Len
- B. Length
- C. Elements
- D. MaxLen

Answer: B) Length

Explanation:

The **Length** property is used to get the total number of elements in C#.

[Discuss this Question](#)

66. What will be the output of the following C# code?

```

using System;

namespace MyApplication {
class Program {
    static void
Main(string[] args) {        "iPhone", "Samsung", "Vivo"
    string[] mobiles =        {}
    Console.WriteLine(mobiles[0] + mobiles[2]);
    }
}
}

```

- A. iPhoneVivo
- B. iPhone+Vivo
- C. Exception
- D. iPhone Vivo **Answer:** A) iPhoneVivo

Explanation:

In the above code, the statement `mobiles[0]+mobiles[2]` will concatenate the 0th and 2nd elements that are "iPhone" and "Vivo". Thus, the output will be "iPhoneVivo".

[Discuss this Question](#)

67. Which array method is used to sort an array alphabetically or in an ascending order in C#?

- A. sort()
- B. sorting()
- C. Sort()
- D. Sorting() **Answer:** C) Sort()

Explanation:

The `Sort()` method is used to sort an array alphabetically or in an ascending order in C#.

[Discuss this Question](#)

68. What will be the output of the following C# code?


```
using System;

namespace MyApplication {
class Program {
    static void
Main(string[] args) {        "iPhone", "Samsung", "Vivo"
    string[] mobiles =
        Console.WriteLine(mobiles[0] + mobiles[2]);
    }
}
}
```

- A. iPhone
- B. Vivo
- C. iPhoneVivo
- D. Runtime Error

Answer: C) iPhoneVivo

[Discuss this Question](#)

69. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
class Program {
    static void Main(string[] args) {
int[,] ARR = {{1,2},{3,4}};
        Console.WriteLine(ARR.GetLength(0) + "," + ARR.GetLength(1));
    }
}
}
```

- A. 4,4
- B. 2,2
- C. Compilation Error
- D. Runtime Error **Answer:** B) 2,2

Explanation:

The above code will print the length of the of the first and second rows of the above two-dimensional array.

[Discuss this Question](#)

70. Which of the correct syntax to declare an array with 2 rows and 3 columns in C#?

- A. `int arr[2][3] = new int[2][3];`
- B. `int arr[2,3] = new int[2,3];`
- C. `int[,] arr = new int[2,3];`
- D. `int [,]arr = new [2,3]int;` **Answer:** C) `int[,] arr = new int[2,3];`

Explanation:

The correct way to declare an array with 2 rows and 3 columns in C# is:

```
int[,] arr = new int[2,3];
```

[Discuss this Question](#)

7) C# OOP MCQs

71. Which keyword is used to define a class in C#?

- A. Class
- B. class
- C. System.Class
- D. OOPS.class **Answer:** B) class

Explanation:

The `class` keyword is used to define a class in C#.

Syntax:

```
class class_name
{
    // Class Definition
}
```

[Discuss this Question](#)

72. Which is the correct way to declare an object of the class in C#?

- A. Class_Name Object_Name = new Class_Name();
- B. Class_Name Object_Name;
- C. new Object_Name as Class_Name();
- D. Both A and B

Answer: A) Class_Name Object_Name = new Class_Name();

Explanation:

The correct way to declare an object of the class in C# is:

```
Class_Name Object_Name = new Class_Name();
```

Consider the below example:

```
using System;

namespace MyApplication {
class Mobiles {
    string brand = "Apple"

    static void Main(string[] args) {
Mobiles mobile = new Mobiles();
        Console.WriteLine(mobile.brand);
    }
}

// Output: Apple
```

[Discuss this Question](#)

73. Which operator is used to access variables/fields inside a class in C#?

- A. Arrow Operator (->)
- B. Dot Operator (.)
- C. Greater Than (>)
- D. Dot and Greater Than (.>) **Answer:** B) Dot Operator (.)

Explanation:

The dot (.) symbol (or dot operator) is used to access variables/fields in a class in C#.

Syntax:

```
Class_Name.Variable_Name/Field_Name;
```

[Discuss this Question](#)

74. Is overriding of a function possible in the same class in C#?

- A. Yes
- B. No **Answer:** B) No

Explanation:

No, overriding of a function is not possible in the same class in C#. As per the explanation on [MSDN](#) – The override modifier is required to extend or modify the abstract or virtual implementation of an inherited method, property, indexer, or event.

[Discuss this Question](#)

75. Which is not a type of constructor in C#?

- A. Static Constructor
- B. Private Constructor
- C. Body Constructor
- D. Parameterized Constructor **Answer:** C) Body Constructor

Explanation:

There are basically 5 types of the constructors in C#, they are:

- Static constructor
- Private constructor
- Copy constructor
- Default constructor
- Parameterized constructor

[Discuss this Question](#)

76. How many types of access modifiers in C#?

- A. 2 B. 3 C. 4
D. 5

Answer: C) 4

Explanation:

In C#, there are 4 types of access modifiers, they are:

- public
- private
- protected
- internal

[Discuss this Question](#)

77. What does the access modifier do in C#?

- A. To maintain the syntax
B. To define a variable inside the class
C. To access the variables defined inside the class
D. To control the visibility of class members **Answer:** D) To control the

visibility of class members

Explanation:

In C#, there are 4 types of access modifiers they are public, private, protected, and internal. And these access modifiers are used to control the visibility of class members (the security level of each individual class and class member).

[Discuss this Question](#)

78. The internal access modifier is used for ____.

- A. Types and type members
B. Defining a field that can be accessed in all classes
C. Defining a field that can be accessed in inherited classes
D. All of the above

Answer: A) Types and type members

Explanation:

In C#, the internal access modifier is used for types and type members. The internal types or members (those are defined by the using of internal keyword/ access modifier) are accessible only within files in the same assembly.

[Discuss this Question](#)

79. The protected access modifier defines a member that can be accessible within ____.

- A. its class and all other classes
- B. its class and by derived class instances
- C. its class only
- D. None of the above

Answer: B) its class and by derived class instances

Explanation:

In C#, the protected access modifier defines a member that can be accessible within its class and by derived class instances.

[Discuss this Question](#)

80. Does C# support multiple inheritance?

- A. Yes
- B. No **Answer:** B) No

Explanation:

No, C# does not support multiple class inheritance.

[Discuss this Question](#)

81. Which C# concept has the capability of an object to take number of different forms and hence display behaviour as accordingly?

- A. Polymorphism
- B. Encapsulation
- C. Abstraction
- D. None of the above **Answer:** A) Polymorphism

Explanation:

In C#, the concept has the capability of an object to take number of different forms and hence display behaviour as accordingly known as "Polymorphism".

[Discuss this Question](#)

82. What will be the output of the following C# code?

```
using System;

namespace MyApplication {
public class Class1 {
public static int x = 10;
}    public class Class2:
Class1 {    public static int
x = 20;
    static void Main(string[] args) {
        Console.WriteLine(x + " " + Class1.x);
    }
}
}
```

- A. 20, 20 B. 10, 10
- C. 20, 10
- D. Exception **Answer:** C) 20, 10

Explanation:

In the above code, we are printing the values of `x` which is the member of `Class2` and `Class1.x` which is the member of `Class1`. Thus, the output will be "20, 10".

[Discuss this Question](#)

83. What is the C# keyword which is used to change data and behaviour of a base class by replacing a member of the base class with a new derived member?

- A. overrides
- B. protected
- C. base
- D. new **Answer:** D) new

Explanation:

The C# keyword **new** is used to change data and behaviour of a base class by replacing a member of the base class with a new derived member.

[Discuss this Question](#)

84. Which keyword is used to declare an interface in C#?

- A. interface
- B. Interface
- C. implement
- D. Implement **Answer:** A) interface

Explanation:

In C#, an interface can be declared using the **interface** keyword. An interface can contain declarations of methods, properties, indexers, and events.

[Discuss this Question](#)

85. In C#, by default, the default interface methods are ____.

- A. virtual
- B. sealed
- C. private
- D. public

Answer: A) virtual

Explanation:

In C#, by default, the default interface methods are virtual unless the sealed or private modifier is used.

[Discuss this Question](#)

86. In C#, the objects created using new operator are stored in ____.

- A. Cache Memory
- B. Stack Memory
- C. Heap Memory
- D. None of the above **Answer:** C) Heap Memory

Explanation:

In C#, the objects created using new operator are stored in Heap Memory.

[Discuss this Question](#)

87. Which of the following cannot be used to declare an interface in C#?

- A. Methods
- B. Properties C. Events
- D. Structures **Answer:**

D) Structures

Explanation:

In C#, to declare an interface – we cannot use structures.

[Discuss this Question](#)

88. Which of the access specifier is used in interface in C#?

- A. private
- B. public
- C. protected
- D. All of the above **Answer:** B) public

Explanation:

In C#, the interface members are always **public**, because the purpose of an interface is to enable other types to access a class or struct. No other access modifiers can be applied to interface members.

[Discuss this Question](#)

89. Which type of class does not have its own objects but acts as a base class for its subclass in C#?

- A. Abstract Class
- B. Static Class
- C. Sealed Class
- D. Protected Class **Answer:** A) Abstract Class

Explanation:

In C#, the Abstract Class does not have its own objects but acts as a base class for its subclass.

[Discuss this Question](#)

90. Which modifier is used to while redefining an abstract method by a derived class in C#?

- A. Overloads
- B. New
- C. Overrides
- D. Virtual

Answer: C) Overrides

Explanation:

In C#, the **Overrides** modifier is used to while redefining an abstract method by a derived class.

[Discuss this Question](#)

8) C# Miscellaneous Topics MCQs

91. Does C# support pointers?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Yes, C# supports pointers in a limited extent.

[Discuss this Question](#)

92. A C# pointer is used to store the ___ of another type.

- A. Value
- B. Memory address
- C. Size of the type
- D. Reference of the variable **Answer:** B) Memory address

Explanation:

A C# pointer is used to store the memory address of another type.

[Discuss this Question](#)

93. C# pointer can only be declared to hold the memory address of ___.

- A. value types and arrays
- B. reference types
- C. pointer types
- D. reference and pointer types **Answer:** A) value types and arrays

Explanation:

C# pointer can only be declared to hold the memory address of value types and arrays. Unlike reference types, pointer types are not tracked by the default garbage collection mechanism.

[Discuss this Question](#)

94. How many catch blocks can be used with a single try block in C#?

- A. One
- B. Two
- C. Many
- D. None of the above **Answer:** C) Many

Explanation:

In C#, there can be multiple (many) catch blocks with a single try block.

[Discuss this Question](#)

95. Is the use of return statement necessary in every function in C#?

- A. Yes
- B. No **Answer:** A) Yes

Explanation:

Yes, the use of return statement is necessary in every function in C#.

[Discuss this Question](#)

96. Which access specifier should be used for Main() method in C#?

- A. private
- B. public
- C. protected
- D. internal

Answer: B) public

Explanation:

The C# Main() method should be defined as public because it is called by runtime. By default Main() method is private.

[Discuss this Question](#)

97. In C#, a namespace is the collection of classes?

- A. True
- B. False

Answer: A) True

Explanation:

Yes, a namespace is the collection of classes.

[Discuss this Question](#)

98. Which is the C# class from which data type UInt is derived?

- A. System.Int16
- B. System.Int32
- C. System.UInt16
- D. System.UInt32 **Answer:** D) System.UInt32

Explanation:

The `UInt` data type is derived from `System.UInt32` class.

[Discuss this Question](#)

99. Which is the first line of a C# program?

- A. using System;
- B. using system;
- C. using Namespace;
- D. namespace MyApplication **Answer:** A) using System;

Explanation:

The first line of a C# program is:

```
using System;
```

[Discuss this Question](#)

100. In C#, structures are used for ___ objects such as mobiles, cars, etc.

- A. Lightweight
- B. Darkweight
- C. Extra
- D. Compress **Answer:** A) Lightweight

Explanation:

In C#, structures are used for lightweight objects such as mobiles, cars, etc.