

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

```
```csharp
int x = 10;
int y = x++;
Console.WriteLine(y);
```
```

- A) 10
- B) 11
- C) 9
- D) Compilation Error
- ****Answer:** A) 10**

2. Which of the following is correct about C# `string` type?

- A) `string` is a value type.
- B) `string` is a reference type.
- C) `string` is a pointer type.
- D) `string` is a nullable type.
- ****Answer:** B) `string` is a reference type.**

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

```
```csharp
int a = 5;
int b = 10;
Console.WriteLine(a == b ? "Equal" : "Not Equal");
```
```

- A) Equal
- B) Not Equal
- C) Compilation Error
- D) Runtime Error
- ****Answer:** B) Not Equal**

4. Which of the following methods is used to sort an array in C#?

- A) `Array.Sort()`
- B) `Array.Order()`
- C) `Array.Reverse()`
- D) `Array.Sorted()`
- **Answer:** A) `Array.Sort()`

5. What will be the output of the following code?

```
```csharp
string s1 = "abc";
string s2 = "abc";
Console.WriteLine(Object.ReferenceEquals(s1, s2));
```
```

- A) True
- B) False
- C) Null
- D) Compilation Error
- **Answer:** A) True

6. Which of the following can be used as a base class in C#?

- A) Sealed class
- B) Abstract class
- C) Static class
- D) Partial class
- **Answer:** B) Abstract class

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

```
```csharp
int[] arr = { 1, 2, 3, 4 };
Console.WriteLine(arr[4]);
```
```

- A) 4
- B) 0
- C) IndexOutOfRangeException
- D) Compilation Error
- ****Answer:** C) IndexOutOfRangeException**

8. Which of the following keywords is used to inherit a class in C#?

- A) ``inherits``
- B) ``extends``
- C) ``derived``
- D) ``:``
- ****Answer:** D) ``:``**

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

```
```csharp
double a = 10.5;
int b = (int)a;
Console.WriteLine(b);
```
```

- A) 10
- B) 11
- C) 10.5
- D) Compilation Error
- ****Answer:** A) 10**

10. What is the output of the following C# code?

```
```csharp
int[] arr = {1, 2, 3, 4, 5};
int sum = 0;
for(int i = 0; i < arr.Length; i++)
{

```

```
 sum += arr[i];
 if(sum > 10)
 break;
 }
 Console.WriteLine(sum);
 ...
```

- A) 15
- B) 10
- C) 6
- D) 11
- **\*\*Answer:\*\* D) 11**

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

```
```csharp
int x = 5;
int y = ++x * 2;
Console.WriteLine(y);
...

```

- A) 10
- B) 12
- C) 14
- D) 16
- ****Answer:** B) 12**

12. Which of the following statements about delegates in C# is true?

- A) Delegates are value types.
- B) Delegates can only point to methods that have a matching signature.
- C) Delegates are not type-safe.
- D) Delegates cannot be multicast.
- ****Answer:** B) Delegates can only point to methods that have a matching signature.**

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

```
```csharp
string str = null;
Console.WriteLine(str?.Length ?? -1);
```
```

- A) 0
- B) -1
- C) NullReferenceException
- D) Compilation Error
- ****Answer:** B) -1**

14. Which of the following is a valid statement about interfaces in C#?

- A) An interface can provide implementation of methods.
- B) An interface can have instance fields.
- C) A class can implement multiple interfaces.
- D) Interfaces cannot inherit other interfaces.
- ****Answer:** C) A class can implement multiple interfaces.**

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

```
```csharp
int[] arr = new int[3];
Console.WriteLine(arr[0]);
```
```

- A) 0
- B) 1
- C) Null
- D) Compilation Error
- ****Answer:** A) 0**

16. Which of the following is true about the `readonly` keyword in C#?

- A) `readonly` fields can only be assigned at declaration or in a constructor.
- B) `readonly` fields can be modified anywhere in the class.

- C) `readonly` is the same as `const`.
- D) `readonly` fields must be static.
- **Answer:** A) `readonly` fields can only be assigned at declaration or in a constructor.

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

```
```csharp
int a = 5, b = 0;

try
{
 int c = a / b;
}
catch (DivideByZeroException)
{
 Console.WriteLine("Divide by zero");
}
finally
{
 Console.WriteLine("Finally block");
}
...
```
```

- A) Divide by zero
- B) Divide by zero\nFinally block
- C) Finally block
- D) Compilation Error
- **Answer:** B) Divide by zero\nFinally block

18. Which of the following LINQ operators is used to filter elements based on a condition?

- A) `Select`
- B) `Where`
- C) `GroupBy`
- D) `OrderBy`

- **Answer:** B) `Where`

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

```
```csharp
int[] numbers = { 1, 2, 3, 4, 5 };
var query = from num in numbers where num > 3 select num;
Console.WriteLine(query.Count());
```
```

- A) 2

- B) 3

- C) 4

- D) 5

- **Answer:** A) 2

20. Which of the following is correct about the `ref` keyword in C#?

- A) The `ref` keyword is used to pass arguments by value.

- B) The `ref` keyword is used to pass arguments by reference.

- C) The `ref` keyword is used to declare constants.

- D) The `ref` keyword is used to declare readonly fields.

- **Answer:** B) The `ref` keyword is used to pass arguments by reference.

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

```
```csharp
int x = 5;
int y = 10;
int z = x > y ? x : y;
Console.WriteLine(z);
```
```

- A) 5

- B) 10

- C) 15

- D) Compilation Error

- **Answer:** B) 10

22. Which of the following correctly describes the `params` keyword in C#?

- A) The `params` keyword allows a method to accept a variable number of arguments.
 - B) The `params` keyword allows a method to return multiple values.
 - C) The `params` keyword can be used on any data type.
 - D) The `params` keyword is used to declare constant parameters.
- **Answer:** A) The `params` keyword allows a method to accept a variable number of arguments.

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

```
```csharp
int[] arr = { 1, 2, 3, 4 };
Array.Reverse(arr);
Console.WriteLine(arr[0]);
```
```

- A) 1
 - B) 2
 - C) 3
 - D) 4
- **Answer:** D) 4

24. Which of the following statements about C# `struct` is correct?

- A) `struct` is a reference type.
 - B) `struct` cannot have methods.
 - C) `struct` can inherit from another class.
 - D) `struct` is a value type.
- **Answer:** D) `struct` is a value type.

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

```
```csharp
string s = "Hello, World!";
```



```
s = s.ToLower();
Console.WriteLine(s);
...
```

- A) hello, world!
- B) Hello, World!
- C) HELLO, WORLD!
- D) Compilation Error
- **\*\*Answer:\*\*** A) hello, world!

### 26. Which of the following methods is used to compare two strings in C#?

- A) `String.Compare()`
- B) `String.Equals()`
- C) `String.Match()`
- D) `String.Check()`
- **\*\*Answer:\*\*** A) `String.Compare()`

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

```
```csharp  
int a = 10;  
int b = 20;  
a += b;  
Console.WriteLine(a);  
...
```

- A) 10
- B) 20
- C) 30
- D) 40
- ****Answer:**** C) 30

28. Which of the following statements about C# `enum` is correct?

- A) `enum` can only have integer values.

- B) `enum` is a reference type.
- C) `enum` values must be unique.
- D) `enum` can have methods.
- **Answer:** A) `enum` can only have integer values.

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

```
```csharp
int[] numbers = { 1, 2, 3, 4, 5 };
var result = numbers.FirstOrDefault(n => n > 3);
Console.WriteLine(result);
```
```

- A) 1
- B) 3
- C) 4
- D) 5
- **Answer:** C) 4

30. Which of the following is correct about the `async` keyword in C#?

- A) The `async` keyword makes a method run on a separate thread.
- B) The `async` keyword makes a method asynchronous but doesn't change how it's called.
- C) The `async` keyword allows a method to return multiple values.
- D) The `async` keyword is used to declare a method that returns void.
- **Answer:** B) The `async` keyword makes a method asynchronous but doesn't change how it's called.

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

```
```csharp
string str1 = "hello";
string str2 = "HELLO";
bool result = str1.Equals(str2, StringComparison.OrdinalIgnoreCase);
Console.WriteLine(result);
```
```

- A) True
- B) False
- C) Compilation Error
- D) Runtime Error
- ****Answer:** A) True**

32. Which of the following statements about the `static` keyword in C# is true?

- A) A `static` class can be instantiated.
- B) `static` methods can access non-static members of a class.
- C) `static` fields are shared among all instances of a class.
- D) `static` constructors are called automatically before any static members are accessed.
- ****Answer:** D) `static` constructors are called automatically before any static members are accessed.**

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

```
```csharp
int x = 10;
int y = 20;
if (x == y)
{
 Console.WriteLine("Equal");
}
else if (x > y)
{
 Console.WriteLine("x is greater");
}
else
{
 Console.WriteLine("y is greater");
}
```
```

- A) Equal
- B) x is greater
- C) y is greater
- D) Compilation Error
- ****Answer:** C) y is greater**

34. Which of the following is true about indexers in C#?

- A) Indexers can be overloaded.
- B) Indexers must have a return type of `int`.
- C) Indexers cannot be defined in interfaces.
- D) Indexers cannot have access modifiers.
- ****Answer:** A) Indexers can be overloaded.**

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

```
```csharp
int[] arr = { 1, 2, 3, 4, 5 };
int sum = 0;
foreach (int num in arr)
{
 if (num % 2 == 0)
 continue;
 sum += num;
}
Console.WriteLine(sum);
```
```

- A) 6
- B) 9
- C) 12
- D) 15
- ****Answer:** B) 9**

36. Which of the following correctly describes the `sealed` keyword in C#?

- A) The `sealed` keyword prevents a class from being inherited.
- B) The `sealed` keyword allows a class to be partially inherited.
- C) The `sealed` keyword is used to declare a class as abstract.
- D) The `sealed` keyword prevents a method from being overridden.
- **Answer:** A) The `sealed` keyword prevents a class from being inherited.

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

```
```csharp
int a = 5;
int b = 10;
a = b++;
Console.WriteLine(a);
```
```

- A) 5
- B) 10
- C) 11
- D) Compilation Error
- **Answer:** B) 10

38. Which of the following statements about events in C# is correct?

- A) Events can only be raised from within the class where they are declared.
- B) Events can be used without a delegate.
- C) Events cannot be multicast.
- D) Events cannot be unsubscribed once subscribed.
- **Answer:** A) Events can only be raised from within the class where they are declared.

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

```
```csharp
int[] numbers = { 1, 2, 3, 4, 5 };
var result = numbers.Skip(2).Take(2);
```
```

```
Console.WriteLine(result.First());
```

```
...
```

- A) 1

- B) 2

- C) 3

- D) 4

- ****Answer:** C) 3**

40. Which of the following correctly describes the use of the `new` keyword in C#?

- A) The `new` keyword can only be used to create instances of value types.

- B) The `new` keyword is used to hide a base class member.

- C) The `new` keyword is used to make methods abstract.

- D) The `new` keyword is used to make methods virtual.

- ****Answer:** B) The `new` keyword is used to hide a base class member.**

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

```
```csharp
```

```
int x = 10;
```

```
int y = 20;
```

```
Swap(ref x, ref y);
```

```
Console.WriteLine($"x = {x}, y = {y}");
```

```
void Swap(ref int a, ref int b)
```

```
{
```

```
 int temp = a;
```

```
 a = b;
```

```
 b = temp;
```

```
}
```

```
...
```

- A) x = 10, y = 20

- B) x = 20, y = 10

- C) x = 0, y = 0

- D) Compilation Error
- **Answer:** B) x = 20, y = 10

### 42. Which of the following statements about the `abstract` keyword in C# is correct?

- A) Abstract methods can have a body.
- B) Abstract classes can be instantiated.
- C) Abstract methods must be implemented in derived classes.
- D) Abstract classes cannot have constructors.
- **Answer:** C) Abstract methods must be implemented in derived classes.

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

```
```csharp
string s = "hello";
s = s.Replace('l', 'w');
Console.WriteLine(s);
```
```

- A) hewwo
- B) hewwwwo
- C) hellow
- D) Compilation Error
- **Answer:** A) hewwo

### 44. Which of the following correctly describes a `partial` class in C#?

- A) A `partial` class allows methods to be overloaded.
- B) A `partial` class can be defined across multiple files.
- C) A `partial` class can only be defined in the same namespace.
- D) A `partial` class can have multiple constructors.
- **Answer:** B) A `partial` class can be defined across multiple files.

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

```
```csharp
```

```
int[] arr = { 10, 20, 30, 40 };  
Array.Resize(ref arr, 6);  
Console.WriteLine(arr.Length);  
...
```

- A) 4
- B) 5
- C) 6
- D) Compilation Error
- ****Answer:** C) 6**

46. Which of the following statements about the `finally` block in C# is true?

- A) The `finally` block is executed only if an exception occurs.
- B) The `finally` block is executed regardless of whether an exception occurs or not.
- C) The `finally` block must be present in a `try-catch` structure.
- D) The `finally` block can return a value to the calling method.
- ****Answer:** B) The `finally` block is executed regardless of whether an exception occurs or not.**

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

```
```csharp  
double d = 10.5;
int i = (int)d;
Console.WriteLine(i);
...
```

- A) 10
- B) 11
- C) 10.5
- D) Compilation Error
- **\*\*Answer:\*\* A) 10**

### 48. Which of the following statements about C# properties is correct?

- A) Properties can have different access modifiers for the get and set accessors.



- B) Properties can only have a get accessor.
- C) Properties are always virtual.
- D) Properties cannot be abstract.
- **\*\*Answer:\*\* A) Properties can have different access modifiers for the get and set accessors.**

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

```
```csharp
int[] arr = { 1, 2, 3, 4, 5 };
int result = arr.Aggregate((a, b) => a + b);
Console.WriteLine(result);
```
```

- A) 15
- B) 10
- C) 5
- D) Compilation Error
- **\*\*Answer:\*\* A) 15**

### 50. Which of the following statements about `out` parameters in C# is correct?

- A) `out` parameters must be initialized before being passed to a method.
- B) A method using `out` parameters must return a value.
- C) `out` parameters can only be used with reference types.
- D) `out` parameters must be assigned a value within the method.
- **\*\*Answer:\*\* D) `out` parameters must be assigned a value within the method.**

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

```
```csharp
int x = 0;
for (int i = 0; i < 5; i++)
{
    x += i;
}
Console.WriteLine(x);
```
```

...

- A) 10
- B) 15
- C) 20
- D) 5
- \*\*Answer:\*\* A) 10

### 52. Which of the following statements about the `is` keyword in C# is correct?

- A) The `is` keyword is used to cast objects to a different type.
- B) The `is` keyword is used to check if an object is of a specific type.
- C) The `is` keyword is used to compare strings.
- D) The `is` keyword can only be used with reference types.
- \*\*Answer:\*\* B) The `is` keyword is used to check if an object is of a specific type.

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

```
```csharp
int a = 5;
int b = 10;
int c = a + b * 2;
Console.WriteLine(c);
```
```

- A) 30
- B) 25
- C) 20
- D) 15
- \*\*Answer:\*\* C) 25

### 54. Which of the following correctly describes the `default` keyword in C#?

- A) The `default` keyword is used to specify a default value for method parameters.
- B) The `default` keyword is used to declare default constructors.
- C) The `default` keyword is used to provide a default case in a switch statement.

- D) The `default` keyword is used to handle null values.
- **Answer:** C) The `default` keyword is used to provide a default case in a switch statement.

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

```
```csharp
int x = 5;
int y = 3;
int z = x & y;
Console.WriteLine(z);
```
```

- A) 1
  - B) 3
  - C) 5
  - D) 7
- **Answer:** A) 1

### 56. Which of the following is true about generic types in C#?

- A) Generic types can only be used with reference types.
  - B) Generic methods can have multiple type parameters.
  - C) Generics provide runtime type safety.
  - D) Generic types cannot have constraints.
- **Answer:** B) Generic methods can have multiple type parameters.

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

```
```csharp
int[] arr = { 1, 2, 3, 4, 5 };
int result = arr.Max();
Console.WriteLine(result);
```
```

- A) 1
- B) 3

- C) 5
- D) 4
- **Answer:** C) 5

### 58. Which of the following correctly describes the `lock` keyword in C#?

- A) The `lock` keyword is used to prevent multiple threads from executing a block of code simultaneously.
- B) The `lock` keyword is used to protect access to an entire class.
- C) The `lock` keyword is used to restrict access to methods only.
- D) The `lock` keyword is used to declare thread-safe variables.
- **Answer:** A) The `lock` keyword is used to prevent multiple threads from executing a block of code simultaneously.

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

```
``csharp
int a = 1;
int b = a << 2;
Console.WriteLine(b);
...

```

- A) 2
- B) 4
- C) 1
- D) 8
- **Answer:** B) 4

### 60. Which of the following statements about `foreach` loop in C# is correct?

- A) `foreach` loop can only be used with arrays.
- B) `foreach` loop can modify the collection it iterates over.
- C) `foreach` loop automatically handles the index of the collection.
- D) `foreach` loop must be manually terminated.
- **Answer:** C) `foreach` loop automatically handles the index of the collection.

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

```
```csharp
int x = 5;
int y = 10;
x += y -= x;
Console.WriteLine(x);
```
```

- A) 0
- B) 5
- C) 10
- D) 15
- \*\*Answer:\*\* D) 15

### 62. Which of the following statements about `try-catch` blocks in C# is correct?

- A) A `try` block must be followed by at least one `catch` block.
- B) A `try` block can be followed by multiple `finally` blocks.
- C) A `try` block must be followed by both `catch` and `finally` blocks.
- D) A `try` block can be followed by a `finally` block without a `catch` block.
- \*\*Answer:\*\* D) A `try` block can be followed by a `finally` block without a `catch` block.

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

```
```csharp
string str = "123";
int result;
bool success = int.TryParse(str, out result);
Console.WriteLine(success);
```
```

- A) True
- B) False
- C) Compilation Error
- D) Runtime Error

- \*\*Answer:\*\* A) True

### 64. Which of the following correctly describes the `this` keyword in C#?

- A) The `this` keyword can be used to reference the current instance of a class.
  - B) The `this` keyword can be used to reference a static method of a class.
  - C) The `this` keyword can be used to declare variables.
  - D) The `this` keyword can be used to return the current method.
- \*\*Answer:\*\* A) The `this` keyword can be used to reference the current instance of a class.

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

```
```csharp
int[] arr = { 1, 2, 3, 4, 5 };
int result = arr.Count(x => x % 2 == 0);
Console.WriteLine(result);
```
```

- A) 1
  - B) 2
  - C) 3
  - D) 4
- \*\*Answer:\*\* B) 2

### 66. Which of the following statements about extension methods in C# is correct?

- A) Extension methods can only be defined in the class they extend.
  - B) Extension methods cannot access private members of the class they extend.
  - C) Extension methods must be static methods.
  - D) Extension methods cannot have parameters.
- \*\*Answer:\*\* B) Extension methods cannot access private members of the class they extend.

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

```
```csharp
int x = 0;
```

```
do
{
    x++;
} while (x < 5);
Console.WriteLine(x);
...
```

- A) 4
- B) 5
- C) 6
- D) Compilation Error
- ****Answer:** B) 5**

68. Which of the following correctly describes the `volatile` keyword in C#?

- A) The `volatile` keyword is used to declare constants.
- B) The `volatile` keyword ensures that a variable is not cached by the CPU.
- C) The `volatile` keyword is used to declare variables that can change type at runtime.
- D) The `volatile` keyword is used to make variables read-only.
- ****Answer:** B) The `volatile` keyword ensures that a variable is not cached by the CPU.**

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

```
```csharp
string s1 = "hello";
string s2 = s1;
s1 = "world";
Console.WriteLine(s2);
...
```

- A) hello
- B) world
- C) helloworld
- D) Compilation Error
- **\*\*Answer:\*\* A) hello**

### 70. Which of the following statements about `Task` in C# is correct?

- A) A `Task` cannot return a value.
- B) A `Task` represents an operation that runs asynchronously.
- C) A `Task` can only be created using the `new` keyword.
- D) A `Task` must always be awaited.
- \*\*Answer:\*\* B) A `Task` represents an operation that runs asynchronously.

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

```
```csharp
int[] arr = { 2, 4, 6, 8, 10 };
int sum = 0;
for (int i = 0; i < arr.Length; i += 2)
{
    sum += arr[i];
}
Console.WriteLine(sum);
```
```

- A) 20
- B) 18
- C) 16
- D) 30
- \*\*Answer:\*\* B) 18

### 72. Which of the following statements about C# `interface` is correct?

- A) An `interface` can contain fields.
- B) An `interface` can implement methods.
- C) A class can inherit from multiple interfaces.
- D) An `interface` cannot be used as a data type.
- \*\*Answer:\*\* C) A class can inherit from multiple interfaces.



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

```
```csharp
string[] names = { "John", "Paul", "George", "Ringo" };
var result = names.First(name => name.StartsWith("G"));
Console.WriteLine(result);
```
```

- A) John
- B) Paul
- C) George
- D) Ringo
- **\*\*Answer:\*\* C) George**

### 74. Which of the following correctly describes the `internal` keyword in C#?

- A) The `internal` keyword allows access only within the same assembly.
- B) The `internal` keyword allows access only within the same class.
- C) The `internal` keyword allows access only within the same namespace.
- D) The `internal` keyword allows access from any assembly.
- **\*\*Answer:\*\* A) The `internal` keyword allows access only within the same assembly.**

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

```
```csharp
int[] arr = { 1, 2, 3, 4, 5 };
var result = arr.Select(x => x * 2).ToArray();
Console.WriteLine(result[3]);
```
```

- A) 4
- B) 6
- C) 8
- D) 10
- **\*\*Answer:\*\* C) 8**

### 76. Which of the following statements about `switch` statements in C# is correct?

- A) A `switch` statement can only be used with integer types.
- B) A `switch` statement requires a `default` case.
- C) A `switch` statement can have multiple `case` labels with the same value.
- D) A `switch` statement can be used with string values.
- **Answer:** D) A `switch` statement can be used with string values.

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

```
```csharp
int x = 5;
int y = 0;
try
{
    int z = x / y;
}
catch (DivideByZeroException)
{
    Console.WriteLine("Divide by zero");
}
finally
{
    Console.WriteLine("End of try-catch");
}
...
```
```

- A) Divide by zero
- B) Divide by zero\nEnd of try-catch
- C) End of try-catch
- D) Compilation Error
- **Answer:** B) Divide by zero\nEnd of try-catch

### 78. Which of the following statements about the `readonly` keyword in C# is true?

- A) `readonly` fields can only be assigned a value at the time of declaration.
- B) `readonly` fields can be modified in a method.
- C) `readonly` fields can be initialized either at the declaration or in a constructor.
- D) `readonly` fields must be initialized before they are used.
- **Answer:** C) `readonly` fields can be initialized either at the declaration or in a constructor.

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

```
```csharp
int a = 1;
int b = 2;
int c = 3;
int result = (a + b) * c;
Console.WriteLine(result);
```
```

- A) 5
- B) 6
- C) 9
- D) 12
- **Answer:** D) 12

### 80. Which of the following statements about method overloading in C# is correct?

- A) Methods can be overloaded based on the return type alone.
- B) Methods can be overloaded by changing the number of parameters.
- C) Methods cannot be overloaded in C#.
- D) Methods can only be overloaded if they have the same number of parameters.
- **Answer:** B) Methods can be overloaded by changing the number of parameters.

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

```
```csharp
int[] numbers = { 2, 4, 6, 8 };
var result = numbers.Where(n => n > 5).Sum();
Console.WriteLine(result);
```
```

...

- A) 6
- B) 8
- C) 18
- D) 20
- \*\*Answer:\*\* C) 18

### 82. Which of the following statements about inheritance in C# is correct?

- A) C# supports multiple inheritance.
- B) A class can inherit from multiple base classes.
- C) A derived class can override a method from the base class.
- D) A derived class cannot have additional members that the base class does not have.
- \*\*Answer:\*\* C) A derived class can override a method from the base class.

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

```
```csharp
int x = 5;
x = x << 2;
Console.WriteLine(x);
```
```

- A) 10
- B) 15
- C) 20
- D) 25
- \*\*Answer:\*\* C) 20

### 84. Which of the following correctly describes the `new` modifier in C#?

- A) The `new` modifier is used to create a new instance of a class.
- B) The `new` modifier is used to hide a base class member in a derived class.
- C) The `new` modifier is used to declare a variable.
- D) The `new` modifier is used to declare a constant.

- **Answer:** B) The `new` modifier is used to hide a base class member in a derived class.

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

```
```csharp
int[] arr = { 3, 5, 7 };
int result = arr.Aggregate((a, b) => a * b);
Console.WriteLine(result);
```
```

- A) 15
- B) 21
- C) 105
- D) 35

- **Answer:** C) 105

### 86. Which of the following statements about delegates in C# is correct?

- A) Delegates are value types.
  - B) Delegates can point to multiple methods.
  - C) Delegates cannot be used with anonymous methods.
  - D) Delegates must have the `virtual` keyword.
- **Answer:** B) Delegates can point to multiple methods.

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

```
```csharp
string str = "abc";
char ch = str[1];
Console.WriteLine(ch);
```
```

- A) a
- B) b
- C) c
- D) Compilation Error

- **\*\*Answer:\*\* B) b**

### 88. Which of the following is true about the `sealed` keyword in C#?

- A) The `sealed` keyword can only be applied to methods.
  - B) The `sealed` keyword prevents a class from being inherited.
  - C) The `sealed` keyword allows a method to be overridden.
  - D) The `sealed` keyword can be applied to fields.
- **\*\*Answer:\*\* B) The `sealed` keyword prevents a class from being inherited.**

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

```
```csharp
double a = 5.5;
double b = Math.Floor(a);
Console.WriteLine(b);
```
```

- A) 5.5
  - B) 6.0
  - C) 5.0
  - D) Compilation Error
- **\*\*Answer:\*\* C) 5.0**

### 90. Which of the following statements about C# events is correct?

- A) Events cannot be used with delegates.
  - B) Events can only be used with value types.
  - C) Events are a way for a class to provide notifications.
  - D) Events cannot have access modifiers.
- **\*\*Answer:\*\* C) Events are a way for a class to provide notifications.**

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

```
```csharp
int a = 5;
int b = 3;
```

```
int c = a % b;
```

```
Console.WriteLine(c);
```

```
...
```

- A) 1

- B) 2

- C) 3

- D) 5

- ****Answer:** A) 2**

92. Which of the following statements about the ``base`` keyword in C# is correct?

- A) The ``base`` keyword is used to call a method from a derived class.

- B) The ``base`` keyword is used to call a method from the current class.

- C) The ``base`` keyword is used to access members of the base class from a derived class.

- D) The ``base`` keyword is used to create an instance of the base class.

- ****Answer:** C) The ``base`` keyword is used to access members of the base class from a derived class.**

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

```
```csharp
```

```
int[] numbers = { 2, 4, 6, 8 };
```

```
int max = numbers.Max();
```

```
Console.WriteLine(max);
```

```
...
```

- A) 2

- B) 4

- C) 6

- D) 8

- **\*\*Answer:\*\* D) 8**

### 94. Which of the following statements about the ``params`` keyword in C# is correct?

- A) The ``params`` keyword can only be used with value types.

- B) The ``params`` keyword allows a method to accept a variable number of arguments.
- C) The ``params`` keyword can only be used with reference types.
- D) The ``params`` keyword is used to return multiple values from a method.
- **\*\*Answer:\*\*** B) The ``params`` keyword allows a method to accept a variable number of arguments.

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

```
```csharp
string str = "abcdef";
string substr = str.Substring(1, 3);
Console.WriteLine(substr);
```
```

- A) abc
- B) bcd
- C) cde
- D) def
- **\*\*Answer:\*\*** B) bcd

### 96. Which of the following statements about the ``typeof`` operator in C# is correct?

- A) The ``typeof`` operator returns the name of the type as a string.
- B) The ``typeof`` operator returns the size of the type in bytes.
- C) The ``typeof`` operator returns the metadata information for a type.
- D) The ``typeof`` operator can only be used with reference types.
- **\*\*Answer:\*\*** C) The ``typeof`` operator returns the metadata information for a type.

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

```
```csharp
int[] arr = { 1, 2, 3, 4, 5 };
int result = arr.FirstOrDefault(x => x > 3);
Console.WriteLine(result);
```
```

- A) 1



- B) 2
- C) 3
- D) 4
- **\*\*Answer:\*\* D) 4**

### 98. Which of the following statements about C# strings is correct?

- A) Strings are mutable in C#.
- B) Strings are value types in C#.
- C) Strings are reference types in C#.
- D) Strings can be modified using the `Insert` method.
- **\*\*Answer:\*\* C) Strings are reference types in C#.**

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

```
``csharp
int x = 10;
int y = 20;
bool result = x == y || x < y;
Console.WriteLine(result);
``
```

- A) True
- B) False
- C) 10
- D) 20
- **\*\*Answer:\*\* A) True**

### 100. Which of the following statements about C# `foreach` loop is correct?

- A) The `foreach` loop can modify the collection it iterates over.
- B) The `foreach` loop automatically handles the index of the collection.
- C) The `foreach` loop must have an index variable.
- D) The `foreach` loop can only be used with arrays.
- **\*\*Answer:\*\* B) The `foreach` loop automatically handles the index of the collection.**