### 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) hewwwo

- 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.