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2	PG Mates / RoomSharing / Flat Mates	React+Springboot+MySql				
3	Tour and Travel management System	React+Springboot+MySql				
4	Election commition of India (online Voting System)	React+Springboot+MySql				
5	HomeRental Booking System	React+Springboot+MySql				
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17	Gym Management System	React+Springboot+MySql				
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19	CharityDonation web project	React+Springboot+MySql				
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28	Resturant management System	React+Springboot+MySql			
29	Solar Management Project	React+Springboot+MySql			
30	OneStepService LinkLabourContractor	React+Springboot+MySql			
31	Vehical Service Center Portal	React+Springboot+MySql			
32	E-wallet Banking Project	React+Springboot+MySql			
33	Blogg Application Project	React+Springboot+MySql			
34	Car Parking booking Project	React+Springboot+MySql			
35	OLA Cab Booking Portal	React+NextJs+Springboot+MySql			
36	Society management Portal	React+Springboot+MySql			
37	E-College Portal	React+Springboot+MySql			
38	FoodWaste Management Donate System	React+Springboot+MySql			
39	Sports Ground Booking	React+Springboot+MySql			
40	BloodBank mangement System	React+Springboot+MySql			

41	Bus Tickit Booking Project	React+Springboot+MySql
42	Fruite Delivery Project	React+Springboot+MySql
43	Woodworks Bed Shop	React+Springboot+MySql
44	Online Dairy Product sell Project	React+Springboot+MySql
45	Online E-Pharma medicine sell Project	React+Springboot+MySql
46	FarmerMarketplace Web Project	React+Springboot+MySql
47	Online Cloth Store Project	React+Springboot+MySql
48	Train Ticket Booking Project	React+Springboot+MySql
49	Quizz Application Project	JSP+Springboot+MySql
50	Hotel Room Booking Project	React+Springboot+MySql
51	Online Crime Reporting Portal Project	React+Springboot+MySql
52	Online Child Adoption Portal Project	React+Springboot+MySql
53	online Pizza Delivery System Project	React+Springboot+MySql
54	Online Social Complaint Portal Project	React+Springboot+MySql
55	Electric Vehical management system Project	React+Springboot+MySql
56	Online mess / Tiffin management System Project	React+Springboot+MySql
57		React+Springboot+MySql
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60		React+Springboot+MySql

# **Spring Boot + React JS + MySQL Project List**

Sr.No	Project Name	YouTube Link
1	Online E-Learning Hub Platform Project	https://youtu.be/KMjyBaWmgzg?si=YckHuNzs7eC84-IW
2	PG Mate / Room sharing/Flat sharing	https://youtu.be/4P9cIHg3wvk?si=4uEsi0962CG6Xodp
3	Tour and Travel System Project Version 1.0	https://youtu.be/-UHOBywHaP8?si=KHHfE_A0uv725f12
4	Marriage Hall Booking	https://youtu.be/VXz0kZQi5to?si=IIOS-QG3TpAFP5k7
5	<b>Ecommerce Shopping project</b>	https://youtu.be/vJ_C6LkhrZ0?si=YhcBylSErvdn7paq
6	Bike Rental System Project	https://youtu.be/FlzsAmIBCbk?si=7ujQTJqEgkQ8ju2H
7	Multi-Restaurant management system	https://youtu.be/pvV-pM2Jf3s?si=PgvnT-yFc8ktrDxB
8	Hospital management system Project	https://youtu.be/lynlouBZvY4?si=CXzQs3BsRkjKhZCw
9	Municipal Corporation system Project	https://youtu.be/cVMx9NVyI4I?si=qX0oQt-GT-LR_5jF
10	Tour and Travel System Project version 2.0	https://youtu.be/ 4u0mB9mHXE?si=gDiAhKBowi2gNUKZ

Sr.No	Project Name	YouTube Link
11	Tour and Travel System Project version 3.0	https://youtu.be/Dm7nOdpasWg?si=P_Lh2gcOFhlyudug
12	Gym Management system Project	https://youtu.be/J8_7Zrkg7ag?si=LcxV51ynfUB7OptX
13	Online Driving License system Project	https://youtu.be/3yRzsMs8TLE?si=JRI_z4FDx4Gmt7fn
14	Online Flight Booking system Project	https://youtu.be/m755rOwdk8U?si=HURvAY2VnizlyJlh
15	Employee management system project	https://youtu.be/ID1iE3W GRw?si=Y jv1xV BljhrD0H
16	Online student school or college portal	https://youtu.be/4A25aEKfei0?si=RoVgZtxMk9TPdQvD
17	Online movie booking system project	https://youtu.be/Lfjv_U74SC4?si=fiDvrhhrjb4KSlSm
18	Online Pizza Delivery system project	https://youtu.be/Tp3izreZ458?si=8eWAOzA8SVdNwlyM
19	Online Crime Reporting system Project	https://youtu.be/0UlzReSk9tQ?si=6vN0e70TVY1GOwPO
20	Online Children Adoption Project	https://youtu.be/3T5HC2HKyT4?si=bntP78niYH802I7N

# 1) C# Basics MCQs

1.	C#	is	a	program	ıming	language,	deve	loped	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.

Discuss this Question

# 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
- В. .срр
- C. .cs
- D. .csp

Answer: C) .cs

### **Explanation:**

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

Discuss this Question

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

- A. Anders Heilsberg
- B. Douglas Crockford
- C. Rasmus Lerdorf
- D. Brendan Eich

**Answer:** A) Anders Hejlsberg

### **Explanation:**

C# programming language is developed by Anders Hejlsberg.

Discuss this Question

## 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.

Discuss this Question

## 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 compiler 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
0	K
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.Write(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 = Convert.ToInt32(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: 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. ToFloat(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. ToFloat(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.

# 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 of 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);
E. do
F. {
G. statement(s);
H. } while (test condition)
Ι.
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);
0.}
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);
        }
}</pre>
```

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.

# 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 after evaluating the Console.WriteLine() 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(;;)
```

## 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 <u>foreach loop</u> 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;
    }
}</pre>
```

```
}

/*
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#.

## 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 <a href="String.Length">String.Length</a> 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 returns "True". And, the CompareTo() method returns an int value (Less than 0, o, or greater than 0). The statement s2.CompareTo(s1) will returns 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 characters, 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 Ouestion

# 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) {
        string[] mobiles = { "iPhone", "Samsung", "Vivo"};
        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 <a href="System.String">System.String</a>[].

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

```
using System;

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

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

Answer: C) iPhoneVivo

#### 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".

# 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:**

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.



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+91 8007592194 +91 9284926333



codewitharrays@gmail.com



https://codewitharrays.in/project