# MICROSOFT CERTIFICATION GUIDELINES

**Exam Code: - 70-483**

**Exam Name: - Programming in C#**

**Title Earned: - Microsoft Specialist in Programming in C#**

## Skills Measured

- Manage Program Flows (25-30 %)
    - Implementing multithreading and asynchronous processing
    - Manage Multithreading
    - Implement program flow
    - Create and implement events and callbacks
    - Implement exception handling
- Create and Use Types (25-30%)
    - Create types
    - Consume types
    - Enforce encapsulation
    - Create and implement a class hierarchy
    - Find, execute and create types at runtime by using reflection
    - Manage the object lifecycle
    - Manipulate string
- Debug applications and implement security (25-30%)
    - Validate application input
    - Perform symmetric and asymmetric encryption
    - Manage assemblies
    - Debug an application
    - Implement diagnostics in an application
- Implement Data Access (25-30%)
    - Perform I/O Operation
    - Consume data
    - Query and manipulate data and objects by using LINQ
    - Serialize and Deserialize data
    - Store data in and retrieve data from collections

# Exam Details:-

**No of Questions: - 50**

**Duration: - 2Hrs 45 Minutes**

**Types of Questions:-**

- Single Choice
- Multiple Choice
- Drag and Drop
- Hot Spot

# Example of Drag and Drop Questions

You are developing an application by using C#. The application includes an array of decimal values named loanAmounts. You are developing a LINQ query to return the values from the array.

The query must return decimal values that are evenly divisible by two. The values must be sorted from the lowest value to the highest value.

You need to ensure that the query correctly returns the decimal values.

How should you complete the relevant code? (To answer, drag the appropriate code segments to the correct locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

**Select and Place:**

```
join
from
group
ascending
descending
where
orderby
select
```

```
decimal[] loanAmounts = { 303m, 1000m, 85579m, 501.51m, 603m
    1200m, 400m, 22m };
IEnumerable<decimal> loanQuery =
    [        ] amount in loanAmounts
    [        ] amount % 2 == 0
    [        ] amount
    [        ] amount;
```

# Example of Hot Spot Question

You are implementing a library method that accepts a character parameter and returns a string.
If the lookup succeeds, the method must return the corresponding string value. If the lookup fails, the method must return the value "invalid choice."

You need to implement the lookup algorithm.

How should you complete the relevant code? (To answer, select the correct keyword in each drop-down list in the answer area.)

```
Work Area

public string GetResponse(char letter)
{
    string response;
        [      ▼] (letter)
    {
        [    ▼] 'a':
        response = "animal";
        break;
        [    ▼] 'm':
        response = "mineral";
        break;
        [    ▼] :
        response = "invalid choice";
        break;
    }
    return response;
}
```

# Preparation Reference

https://mva.microsoft.com/en-us/training-courses/programming-in-c-jump-start-14254?l=j0iuozSfB_6900115888

https://capgemini.sumtotalsystems.com/sumtotal/core/activitydetails/ViewActivityDetails/337523?actId=337523&UserMode=0&Task=&InvoiceId=&UserAction=&CallerURL=/sumtotal/app/taxonomy/learnerSearch/LearnerSearch.aspx%3FUserMode%3D0%26searchText%3D70-483

https://capgemini.sumtotalsystems.com/sumtotal/core/activitydetails/ViewActivityDetails/337840?actId=337840&UserMode=0&Task=&InvoiceId=&UserAction=&CallerURL=/sumtotal/app/taxonomy/learnerSearch/LearnerSearch.aspx%3FUserMode%3D0%26searchText%3D70-483

https://www.pluralsight.com/courses/csharp-fundamentals-csharp5

https://app.pluralsight.com/player?name=csharp-fundamentals-csharp5-m3&mode=live&clip=0&course=csharp-fundamentals-csharp5&author=scott-allen

https://app.pluralsight.com/player?name=csharp-fundamentals-csharp5-m5&mode=live&clip=0&course=csharp-fundamentals-csharp5&author=scott-allen

## Youtube Video Links

a. https://www.youtube.com/watch?v=RhLLxew4-TY
b. https://www.youtube.com/watch?v=e-5o3ZBWg9Q
c. https://www.youtube.com/watch?v=pcdb6lbwNa0
d. https://www.youtube.com/watch?v=xF0GLxiuk4o
e. https://www.youtube.com/watch?v=gleMlJE0y-4
f. https://www.youtube.com/watch?v=pGakaPDSUww
g. https://www.youtube.com/watch?v=L4hb0juh9gU
h. https://www.youtube.com/watch?v=6SubvPxKnBA
i. https://www.youtube.com/watch?v=92FVIpantyk
j. https://www.youtube.com/watch?v=ZsOIUjJVZz4
k. https://www.youtube.com/watch?v=Xh8YNTSCoLk