

IQRA NATIONAL UNIVERSITY

Department of Computer Science

Mid Term Exam Summer 2020

Subject: **Visual Programming(C #)**  Time: 90 minutes

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There are total **3** questions in this paper.Max Marks: 30

***Note:***

**Every question carries 10 marks.**

 **Q1. How to write Hello program in C# and explain in detail?**

# PROGRAM

### **using System;**

### **namespace Hello**

### **{**

###  **class HelloProgram{**

###  **static void Main(string[]args)**

###  **{**

###  **System.Console.WriteLine("Hello!");**

###  **}**

###  **}**

### **}**

### The “Hello World!” program is often the first program we see when we dive into a new language. It simply prints Hello World! on the output screen.

### The purpose of this program is to get us familiar with the basic syntax and requirements of a programming language

### The namespace keyword is used to define our own namespace. Here we are creating a namespace called static void Main(string[] args){...}

### Main() is a method of class Hello. The execution of every C# program starts from the Main() method. So it is mandatory for a C# program to have a Main() method.

**Q2. a. Write a simple program C # by taking 2 different strings in text boxes**

**concatenate them and display with the help of message box and explain in detail.**

# PROGRAM

### **public class Program{**

### **static public void Main(string[]args)**

### **Console.WriteLine("Enter String 1:");**

### **string str1 = Console.Readline():**

### **Console.WriteLine("Enter String 2:");**

### **string str2 = Console.Readline():**

### **string str;**

### **str = String.Concat(str1,str2);**

### **Console.WriteLine("Concatenated STring is: {0}",str);**

###  In this program system two string as an input from the user and store it in the variable and store these inputs string in str1 and str2 after that two conatinnate these two words we use String.Concat.

### After that we use console.write line to print it.

 **b. Write about different types of type conversions in available in C #**

### Type conversion is converting one type of data to another type. It is also known as Type Casting. In C#, type casting has two forms −

### Implicit type conversion

### These conversions are performed by C# in a type-safe manner. For example, are conversions from smaller to larger integral types and conversions from derived classes to base classes.

### Explicit type conversion

### These conversions are done explicitly by users using the pre-defined functions. Explicit conversions require a cast operator.

###  Following are the built-in types of conversion

##

 **Q3.a. What are constant in C# discuss in detail?**

### In c#, constant is a keyword that is useful to declare constant fields in our applications. Generally, in c# the constant field values are set at compile-time and those values will never change.

###

### In c#, if we use constant keyword to declare a constant field, then that field value cannot be changed throughout the application so we should not use constant keyword with the fields whose value will be changed at any time.

###

### To define constant fields in c#, we need to use Constant keyword during the declaration of fields in our application and we can use constants with numbers, Boolean values, strings or with null references.

###

### It’s mandatory to initialize constant fields with required values during the declaration itself otherwise we will get compile-time errors in our c# application.

###

### In c#, the [static modifier](https://www.tutlane.com/tutorial/csharp/csharp-static-keyword) is not allowed to use during the declaration of constant variables.

### Following is the syntax of defining constant fields using constant keyword in c# programming language.

###

## const data\_type field\_name = "value";

 **b. Write a program on string literal and explain in detail**

##  STRING LITERALS

### String literals or constants are enclosed in double quotes "" or with @"". A string contains characters that are similar to character literals: plain characters, escape sequences, and universal characters.

### You can break a long line into multiple lines using string literals and separating the parts using whitespaces.

### Here are some examples of string literals. All the three forms are identical strings.

### "hello, dear"

### "hello, \

### dear"

### "hello, " "d" "ear"

### @"hello dear"