

TEAM 1

TEAM LEAD :

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LAB PROGRAMS : 07/06/2022

QUESTION 1

Write a program in c# to generate an abstract class A also class B inherits the class A. generate the object for

class B and display the text “call me from B”

PROGRAM :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace AbstractClass
{
    abstract class Laptop
    {
        protected string Brand ;
        protected string spec ;
        public abstract void display();
    }
    class SampleClass_B : Laptop
    {
        public SampleClass_B()
        {
            Brand = "Dell";
            spec = "i5 core";
        }
        public override void display()
        {
            Console.WriteLine("your brand name is: " + Brand);
            Console.WriteLine("your spec is: " + spec);
        }
    }

    class Program
    {
        static void Main(string[] args)
        {
            SampleClass_B obj = new SampleClass_B();
            obj.display();
            Console.ReadLine();
        }
    }
}
```

OUTPUT :

```
file:///c:/users/keerthana/documents/visual studio 2012/Projects/AbstractClass/AbstractClass/bin/Debug/AbstractClass.exe
your brand name is: Dell
your spec is: i5 core
-
```

QUESTION 2

Write a c# program in which you will declare two interface sum and Add inherits these interface through class A1 and display their content.

PROGRAM :

```
using System;
namespace Create
{
    interface i1
    {
        void Get();
    }
    interface i2
    {
        void Sum();
    }
    class A1 : i1 ,i2
    {
        int a,b,c;
        public void Get()
        {
            Console.Write("Enter a number : ");
            a = int.Parse(Console.ReadLine());
            Console.Write("Enter another number : ");
            b = int.Parse(Console.ReadLine());
        }
        public void Sum()
        {
            c = a + b;
            Console.WriteLine("Addition is "+c);
        }
        public void Show()
        {
            Get();
            Sum();
        }
    }

    class Program
    {
        static void Main(string[] args)
        {
            A1 a1 = new A1();
            a1.Show();
        }
    }
}
```

OUTPUT :

Microsoft Visual Studio Debug Console

Enter a number : 5

Enter another number : 6

Addition is 11

D:\DISK-B\NET\dotnet\Create\bin\Debug\net6.0\Create.exe (process 16224) exited with code 0.

To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console

Press any key to close this window . . .

QUESTION 3

Write a program in c# if number is less than 10 and greater than 50 it generate the exception out of range. Else it displays the square of number.

PROGRAM :

```
using System;
class RangeException : Exception
{
    public RangeException(string mss) : base(mss)
    {
    }
}
namespace SquareRange
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.Write("Enter a number : ");
            int num = int.Parse(Console.ReadLine());
            try
            {
                if((num < 10 )|| (num > 50))
                {
                    throw new RangeException("Number is out of Range");
                }
                else
                {
                    int sqr = num * num;
                    Console.WriteLine("Square of {0} is {1}", num, sqr);
                }
            }
            catch(RangeException e)
            {
                Console.WriteLine(e.Message);
            }
            finally
            {
                Console.WriteLine("Program runs successfully");
            }
        }
    }
}
```

OUTPUT :

Microsoft Visual Studio Debug Console

Enter a number : 15

Square of 15 is 225

Program runs successfully

D:\DISK-B\ .NET\dotnet\Create\bin\Debug\net6.0\Create.exe (process 18768) exited
To automatically close the console when debugging stops, enable Tools->Options->
Press any key to close this window . . .