

.NET TECHNOLOGIES

(01CE0523)

Lab Manual

Name: Asif Alam
Enrolment No: 92201703058
Class: 5EC3
Batch: A

INDEX

Lab	Program	Date	Marks	Signature
1.	Program on Class, Object and Constructor			
2.	Program on Inheritance and Interface			
3.	Program on Polymorphism and Exception Handling			
4.	Create web application using ASP.Net Web Controls			
5.	Create web application using ASP.Net Rich Controls			
6.	Create web application using ASP.Net Validation Controls			
7.	Program on Session and Cookie			
8.	Creating web application using MVC			
9.	Create web application that performs CRUD operation using ADO.Net			
10.	Create Web application which use Data Controls like Repeater, DataList, DataGrid			
11.	Program for Creating and using APIs			

Experiment 1

AIM : Program on Class, Object and Constructor

Code: using System;

```
public class Student
{
    String name;
    double cgpi;
    int sem;
    public Student() {
        Console.WriteLine("1. Calling parameterless constructor...");
    }
    public Student(String name)
    {
        this.name = name;
        Console.WriteLine("2. Name: "+ this.name);
    }
    public Student(String name, double cgpi)
    {
        this.name = name;
        this.cgpi = cgpi;
        Console.WriteLine("3. Name: "+ this.name + " CGPI: "+ this.cgpi);
    }
    public Student(String name, double cgpi, int sem)
    {
        this.name = name;
        this.cgpi = cgpi;
        this.sem = sem;
        Console.WriteLine("4. Name: "+ this.name + " CGPI: "+ this.cgpi + " Sem: "+ this.sem);
    }
}
```

```
public static void Main(String[] args)
{
    Console.WriteLine("Menu\n");
    Console.WriteLine("1. Parameterless Constructor...");
    Console.WriteLine("2. Constructor with one parameter...");
    Console.WriteLine("3. Constructor with two parameter...");
    Console.WriteLine("4. Constructor with three parameter...");
    Console.WriteLine("Enter: ");

    int n = Convert.ToInt32(Console.ReadLine());
    switch (n)
    {
        case 1: Student s1 = new Student();
            break;
        case 2: Student s2 = new Student("Asif");
            break;
        case 3: Student s3 = new Student("Asif", 9.32);
            break;
        case 4: Student s4 = new Student("Asif", 9.32, 5);
            break;

        default: Console.WriteLine("Invalid Input");
            break;
    }
}
```

Output:

```
Menu
1. Parameterless Constructor...
2. Constructor with one parameter...
3. Constructor with two parameter...
4. Constructor with three parameter...
Enter:
3
3. Name: Asif CGPI: 9.32
```

Experiment 2

AIM : Program on Inheritance and Interface

Code:

```
interface C1
{
    void methodC1();
}
interface C2
{
    void methodC2();
}
interface C3
{
    void methodC3();
}
public class IC : C1, C2, C3
{
    public void methodC1()
    {
        Console.WriteLine("Method C1");
    }
    public void methodC2()
    {
        Console.WriteLine("Method C2");
    }
    public void methodC3()
    {
        Console.WriteLine("Method C3");
    }
}
```

```
public class R1
{
    public void methodR1()
    {
        Console.WriteLine("MethodR1");
    }
}
class R11 : R1
{
    public void methodR11()
    {
        Console.WriteLine("MethodR11");
    }
}
class R12 : R1
{
    public void methodR12()
    {
        Console.WriteLine("MethodR12");
    }
}
class R111 : R11
{
    public void methodR111()
    {
        Console.WriteLine("MethodR111");
    }
}
class R112 : R12
{
    public void methodR112()
```

```
{  
    Console.WriteLine("MethodR112");  
}  
}  
public class Prac2  
{  
    public static void Main(String[] args)  
    {  
        IC obj1 = new IC();  
        obj1.methodC1();  
        obj1.methodC2();  
        obj1.methodC3();  
  
        R111 r1 = new R111();  
        r1.methodR1();  
        r1.methodR11();  
        r1.methodR111();  
  
        R112 r2 = new R112();  
        r2.methodR112();  
        r2.methodR12();  
    }  
}
```


Output:

```
Method C1  
Method C2  
Method C3  
MethodR1  
MethodR11  
MethodR111  
MethodR112  
MethodR12
```

NOTE:

AIM:

- Font Type: Calibri (Body)
- Font Size: 14
- Bold
- Line Spacing: 1.5

Code

- Font Type: **Cascadia Mono**
- Font Size: 10
- Normal
- Line Spacing: 1.0