C# .Net Programming Assignment 5

- Create separate visual Studio project for each problem statement separately.
- For Business logic write separate class.
- Use Object Oriented concepts while writing the program.

1. Design one class which contains two characteristics as a operands of arithmetic operations. Class contains four behaviours as Add, Sub , Div, Mult which performs asthmatic operations.

Create one single template and store references of all above methods by creating objects of that delegate four times and call the methods through delegate.

```
class Arithmetic
{
	public int no1;
	public int no2;

	public Arithmetic(int x, int y)
	{
		// Logic
	}
	int Add()
	{
		return no1 + no2;
	}
	int Sub()
	{
		// Logic
	}
	int Mult()
	{
		// Logic
	}
	int Div()
	{
		// Logic
	}
}

// Declare delegate
class Marvellous
{
	public static void Main(string[] arg)
	{
		// Create object of delegate
		// Create object of Arithmetic class
		// Store reference of above all methods and call through delegate
	}
}
```

2. Use above class as arithmetic and create array of delegates which stores addresses of all methods and call all methods using delegates array.

```
using System;

class Arithmetic
{
	public int no1;
	public int no2;

	public Arithmetic(int x, int y)
	{
		// Logic
	}
	int Add()
	{
		return no1 + no2;
	}
	int Sub()
	{
		// Logic
	}
	int Mult()
	{
		// Logic
	}
	int Div()
	{
		// Logic
	}
}

	delegate int MarvellousDel();
	public static class Program
	{
			pubic static void Main(String[] arg)
			{
				Arithmetic aobj = new Arithmetic(10,4);

				MarvellousDel[] Dobj = new MarvellousDel[4];

				Dobj[0] = new MarvellousDel(aobj.Add);

				int iret = Dobj[0]();

				Console.WriteLine("Addition is:	{0}", D);

				// Call all remaining methods by storing its references in
delegates array

				return 0;
			}

		}
```

3. Use above class as arithmetic and create multicast delegate which is used to call all methods from arithmetic class.