

Practical - 4

Delegates and events

1. Create a delegate `calArea(float a,float b)` with two float type parameters and having void return type. Create delegate instances for Calculate area of rectangle and triangle and display result on the screen.
2. Create a delegate with one string parameter and having string return type. Use delegate firstly for `concatStr()` and secondly use it for `reverseStr()` method. Create instances of delegate and display concat as well as reverse string by combining delegate instances.
3. Create a program which implements delegate with event model for string modification. Whenever string is modified (by `Replace()`) fire an event to display a message that is “String is modified”.
4. Write a program to create a delegate called `TrafficDel` and a class called `TrafficSignal` with the following delegate methods.

```
Public static void Yellow() {  
    Console.WriteLine(“Yellow Light Signal To Get Ready”);  
}  
Public static void Green() {  
    Console.WriteLine(“Green Light Signal To Go”);  
}  
Public static void Red() {  
    Console.WriteLine(“Red Light Signal To Stop”);  
}
```

Also include a method `IdentifySignal()` to initialize an array of delegate with the above methods and a method `show()` to invoke members of the above array.