

Practical 2 C

1:AIM: 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.

CODE:

TrafficSignal.cs

```
using System;
namespace TrafficDelegateExample
{
    public delegate void TrafficDel();
    class TrafficSignal
    {
        public static void Yellow()
        {
            Console.WriteLine("Yellow light signals to get ready");
        }
        public static void Green()
        {
            Console.WriteLine("Green light signals to go");
        }
        public static void Red()
        {
            Console.WriteLine("Red light signals to stop");
        }
        TrafficDel[] td = new TrafficDel[3];
        public void IdentifySignal()
        {
            td[0] = new TrafficDel(Yellow);
            td[1] = new TrafficDel(Green);
            td[2] = new TrafficDel(Red);
        }
        public void display()
        {

```

```

td[0]();
td[1]();
td[2]();
}
} }

```

Program.cs

```

using System;
namespace TrafficDelegateExample
{
class Program
{
static void Main(string[] args)
{
TrafficSignal ts = new TrafficSignal();
ts.IdentifySignal();
ts.display();
} } }

```

OUTPUT:

Yellow light signals to get ready
Green light signals to go
Red light signals to stop

2:AIM: Write a program to accept a number from the user and throw an exception if the number is not an even number.

CODE:

NotEvenException.cs

```

using System;
namespace ExceptionHandlingExample
{
class NotEvenException:Exception
{
public NotEvenException(string msg)
: base(msg)
{
}
} }

```

Program.cs

```

using System;
namespace ExceptionHandlingExample
{
class Program
{
static void Main(string[] args)
{

```

```
int num;  
try  
{  
    Console.Write("Enter a number: ");  
    num = int.Parse(Console.ReadLine());  
    if ((num % 2) != 0) throw new NotEvenException("Not an even number ");  
    else  
        Console.WriteLine("Its even number ");  
}  
catch (NotEvenException e) { Console.WriteLine(e.Message); }  
} }
```

OUTPUT:

Enter a number: 5
Not an even number
Enter a number: 6
Its even number