

## C# for junior programmers

**"Buy profit. Sell risk."**



**1- Give the definition of the following keywords:**

- delegate:
- implicit:
- in, out, ref :
- lock:
- unchecked:
- override:
- params:
- readonly:
- stackalloc:
- typeof:
- unsafe:
- event:
- as:
- sealed:
- base:

**2- Comment/rewrite the following code**

```
public class A
{
    [MethodImpl(MethodImplOptions.Synchronized)]
    public void doSmtg(int num) { num++; }
}
```

**3- Some native C# containers are "locked" (true/false; why)****4- Comment the following code sample:**

```
class MyException: Exception
{
    public MyException(string message): base(message){ }
    public MyException(string message, Exception innerException):
        base(message, innerException){}
}

public class ExceptionTest
{
    static void DoStuff(){ throw new FileNotFoundException(); }
    public static int Main()
    {
        try
        {
            try
            {
                DoStuff();
                return 0;
            }
            catch(IOException ioe)
            {
                throw new MyException("MyException occurred", ioe);
            }
        }
        finally { Console.WriteLine("*****"); }
    }
}
```

**5- Implement the following pattern:**

**UML class diagram**

