wpf调用c++动态链接库

笔记本:	C#学习笔记		
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注意事项

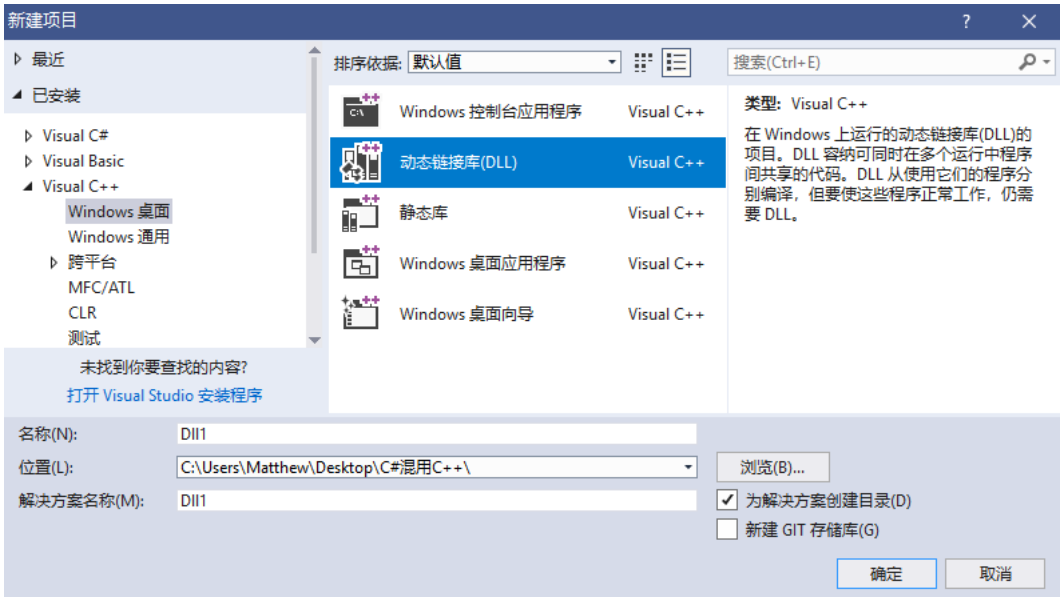
1. c++Dll库编译平台x86还是x64，需要统一版本

动态链接库创建过程

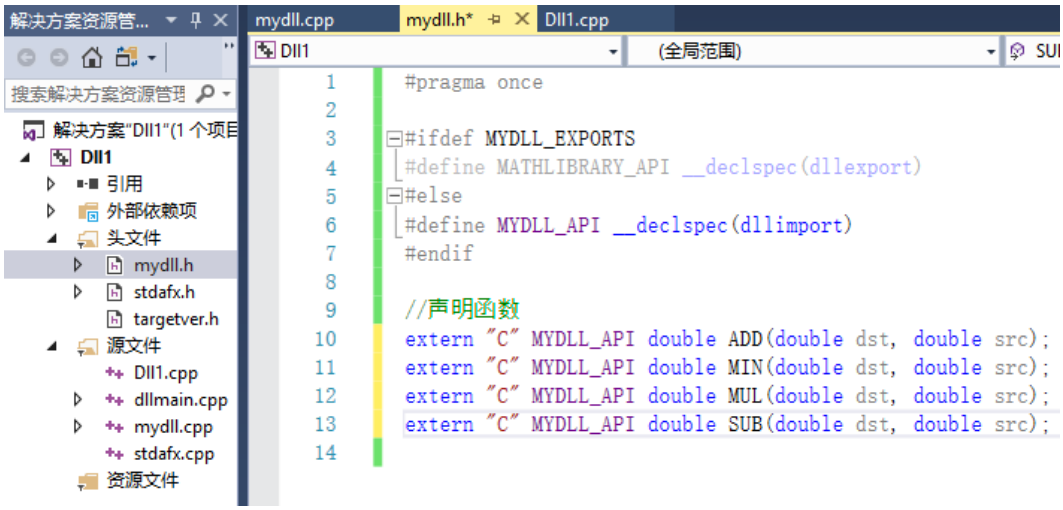
[cnblog章为忠]

[微软官方例程]

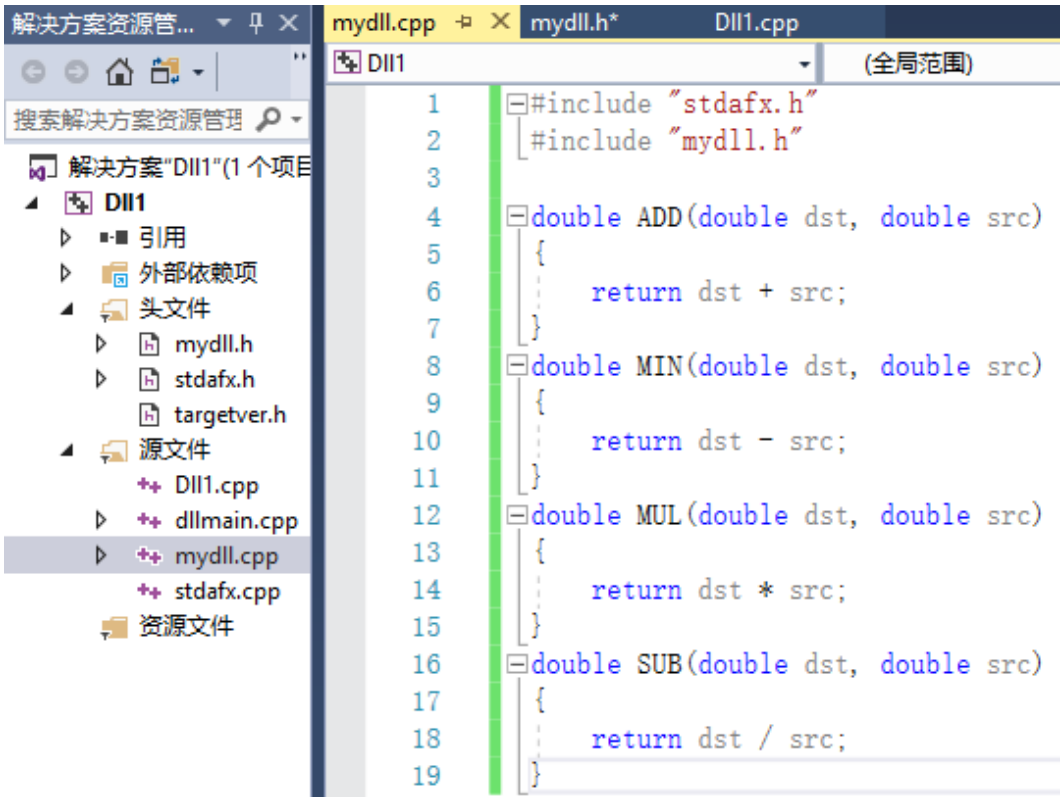
1. vs2017创建动态链接库项目



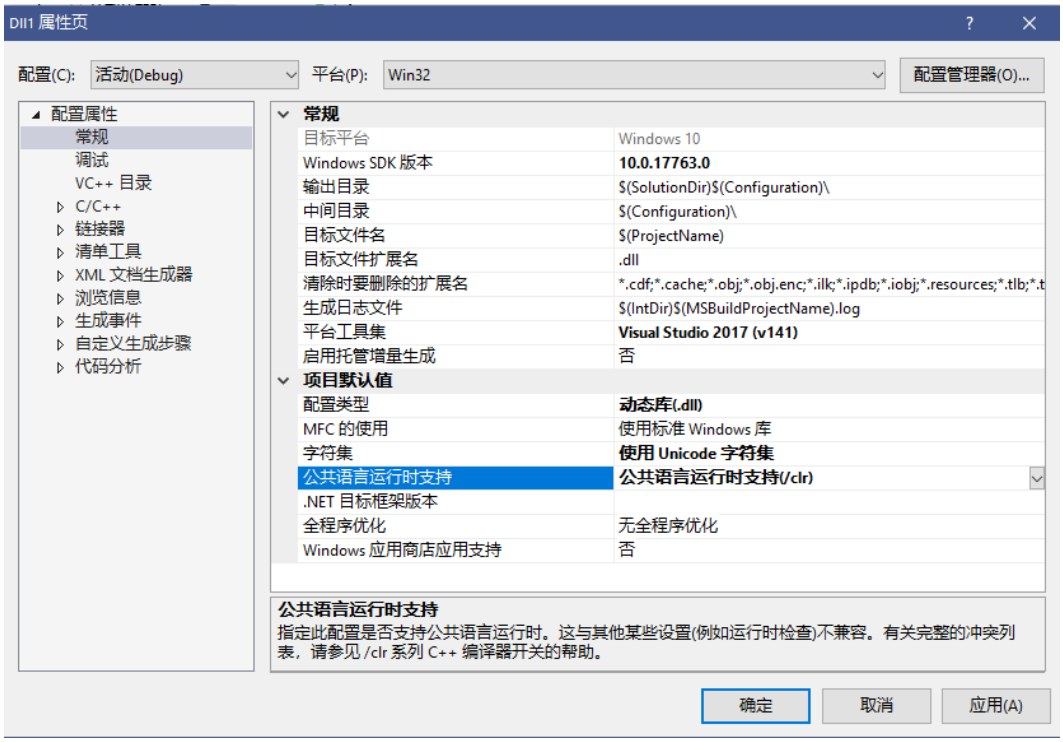
2. 添加头文件，声明函数接口



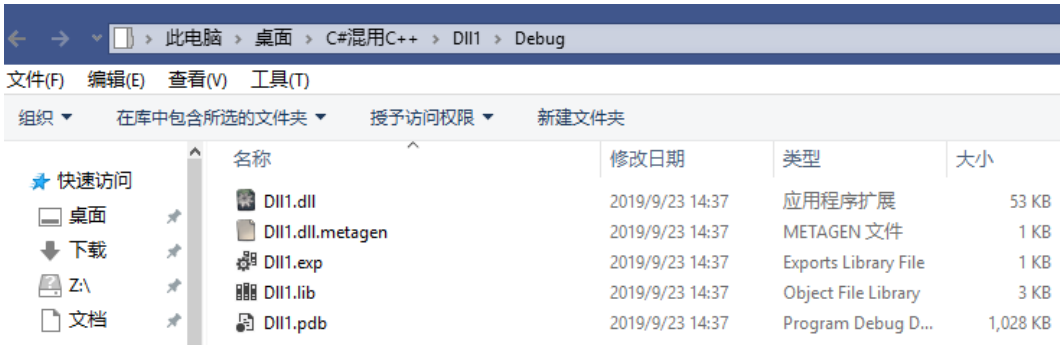
3. 添加源文件，实现相关的函数



4. 添加公共语言运行时支持



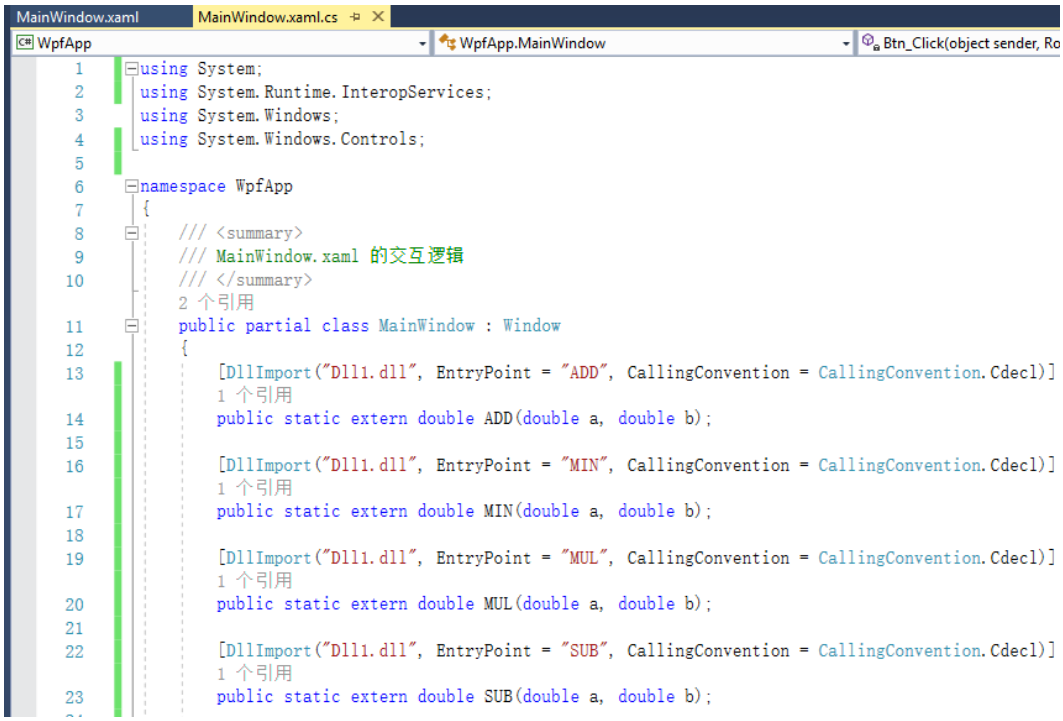
5. 编译生成相关的.dll文件



wpf对c++Dll的静态调用

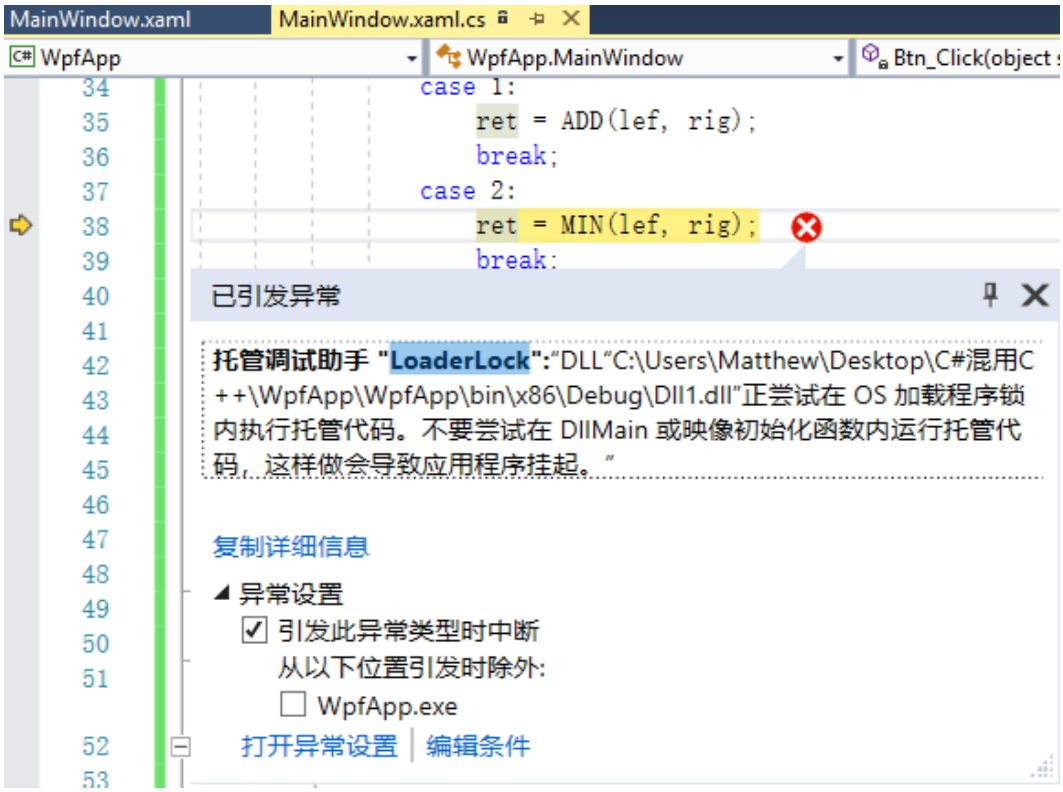
1. 导入c++动态链接库

2. 在C#程序中声明相关DLL函数



```
using System;
using System.Runtime.InteropServices;
using System.Windows;
using System.Windows.Controls;

namespace WpfApp
{
    /// <summary>
    /// MainWindow.xaml 的交互逻辑
    /// </summary>
    2 个引用
    public partial class MainWindow : Window
    {
        [DllImport("Dll1.dll", EntryPoint = "ADD", CallingConvention = CallingConvention.Cdecl)]
        1 个引用
        public static extern double ADD(double a, double b);

        [DllImport("Dll1.dll", EntryPoint = "MIN", CallingConvention = CallingConvention.Cdecl)]
        1 个引用
        public static extern double MIN(double a, double b);

        [DllImport("Dll1.dll", EntryPoint = "MUL", CallingConvention = CallingConvention.Cdecl)]
        1 个引用
        public static extern double MUL(double a, double b);

        [DllImport("Dll1.dll", EntryPoint = "SUB", CallingConvention = CallingConvention.Cdecl)]
        1 个引用
        public static extern double SUB(double a, double b);
```

3. LoaderLock异常



```
case 1:
    ret = ADD(lef, rig);
    break;
case 2:
    ret = MIN(lef, rig);
    break;
```

已引发异常

托管调试助手 "LoaderLock":"DLL"C:\Users\Matthew\Desktop\C#混用C++\WpfApp\WpfApp\bin\x86\Debug\Dll1.dll"正尝试在 OS 加载程序锁内执行托管代码。不要尝试在 DllMain 或映像初始化函数内运行托管代码，这样做会导致应用程序挂起。"

复制详细信息

异常设置

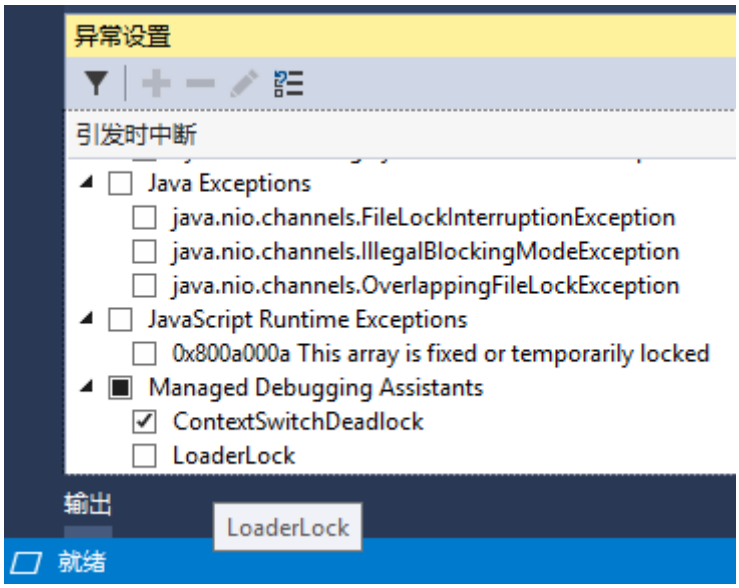
引发此异常类型时中断

从以下位置引发时除外:

WpfApp.exe

打开异常设置 | 编辑条件

解决方法：CTL+E进入异常设置，取消LoaderLock的检测



通过Dependency Walke查看dll的名称，端口