# 软件/资源准备

- VMware或VirtualBox等虚拟机软件
- 一台Windows虚拟机——Win10或Win7等皆可
- Virtual studio(<u>https://visualstudio.microsoft.com/zh-hans/vs/older-downloads/</u>)
- Irvine32包(GitHub Eazybright/Irvine32: A library for assembly language)
- MASM32下载(http://www.masm32.com/download.htm)

# 软件配置

### 1. MASM32

下载后安装一路确认即可

# 2. Irvine32包

下载后解压到任意目录即可, 之后会用到

## 3. VS配置

我这里下载的是VS2019

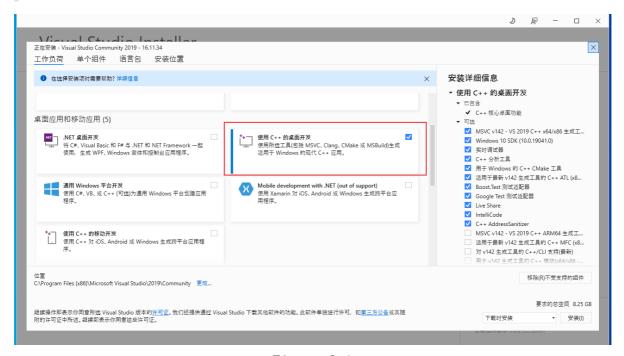


Figure 3-1

我们不需要很多功能,选一个C++桌面开发即可

## 3.1 新建C++空项目



Figure 3-2

## 3.2 生成依赖项

右键项目名称,依次选择生成依赖项、生成自定义

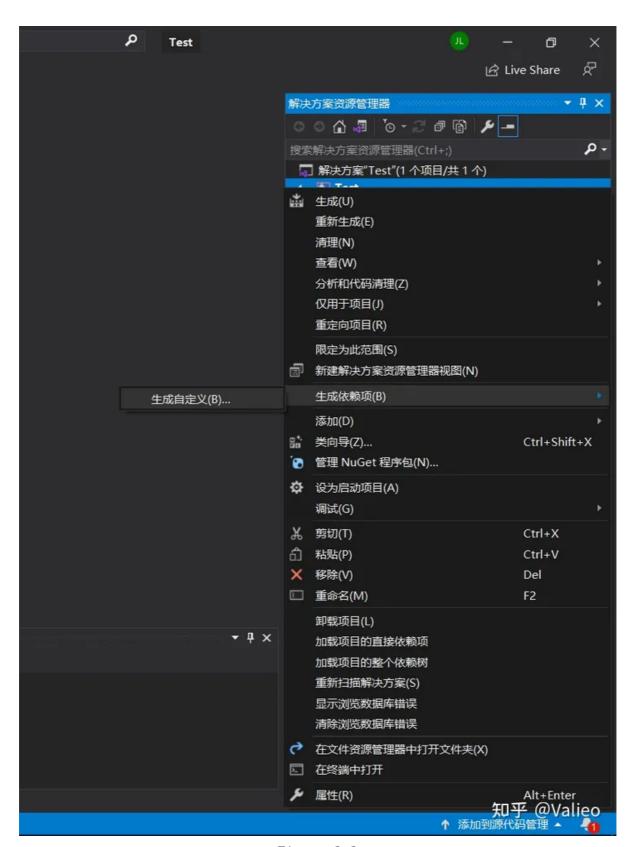


Figure 3-3

Visual C++ 生成自定义文件		?	$\times$
可用的生成自定义项文件(A):			
名称	路径		
☐ ImageContentTask(.ta	\$(VCTargetsPath)\BuildCustomiza	ations\Imag	geCon
☐ lc(.targets, .props)	\$(VCT argets Path)\BuildCustomiza	ations\lc.ta	rgets
marmasm(.targets, .pr	\$(VCT argets Path)\BuildCustomiza	ations\marı	masm.
✓ masm(.targets, .props)	\$(VCT argets Path)\Build Customiza	ations\mas	m.targ
☐ MeshContentTask(.tar	\$(VCTargetsPath)\BuildCustomiza	ations\Mes	hCont
ShaderGraphContent	\$(VCTargetsPath)\BuildCustomiza	ations\Shad	derGra
<			>
查找现有的(F) 刷新列表	Ē(R) 确	ENT OF	C間eo

Figure 3-4

# 3.3 添加汇编源文件

右键"源文件"文件夹,依次选择添加、新建项

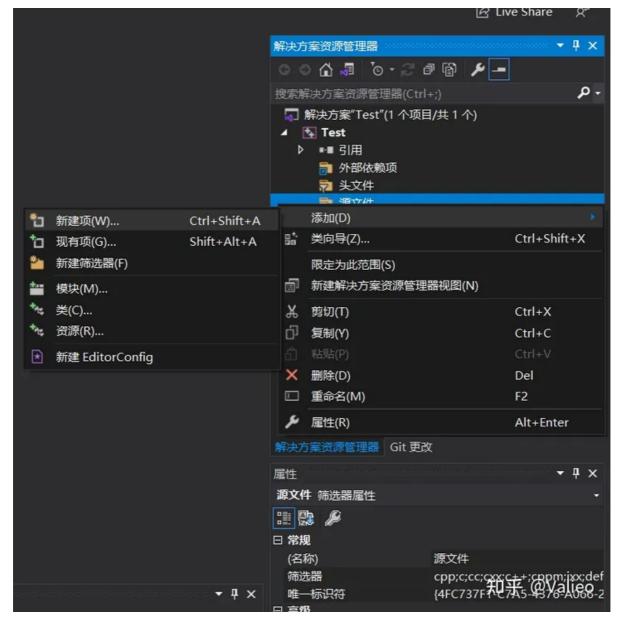


Figure 3-5

在弹出的窗口中选择C++文件(.cpp), 注意名称中的后缀名要改为.asm

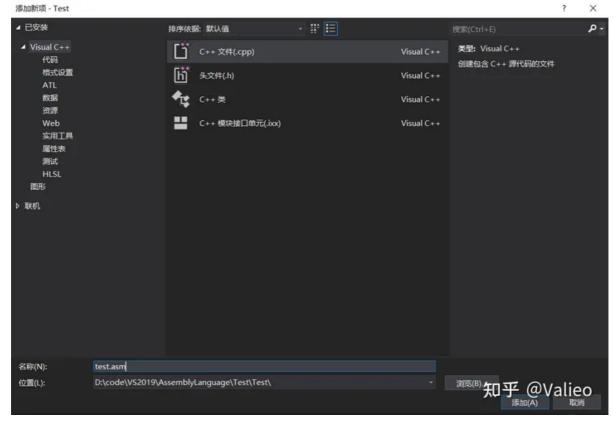


Figure 3-6

#### 右键源文件,选择属性,配置如下

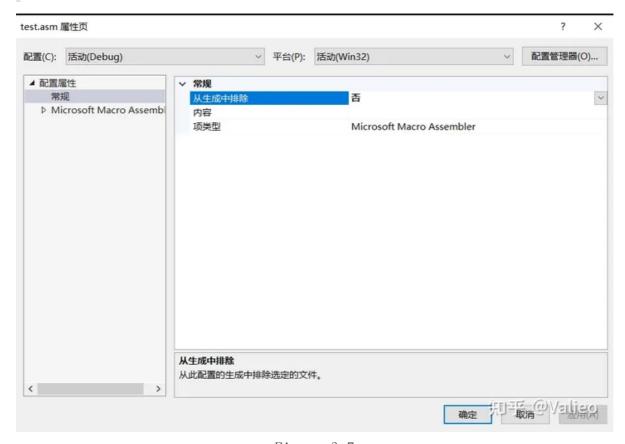


Figure 3-7

### 3.4 附加库设置

#### 附加库可以选择

- Irvine32包
- MASM32

我这里以MASM32为例,Irvine32包可以参考:<u>https://zhuanlan.zhihu.com/p/411532702</u>

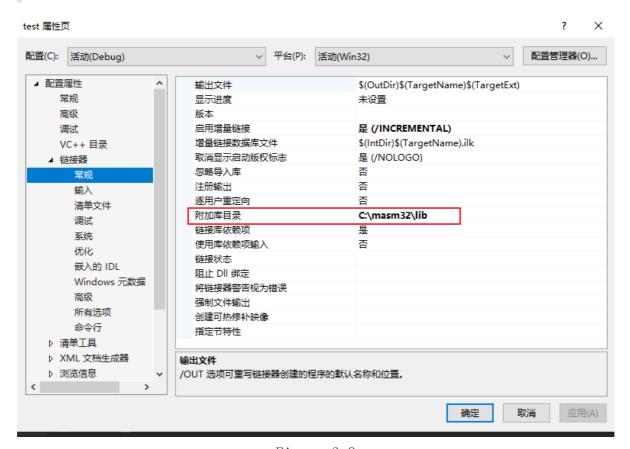


Figure 3-8

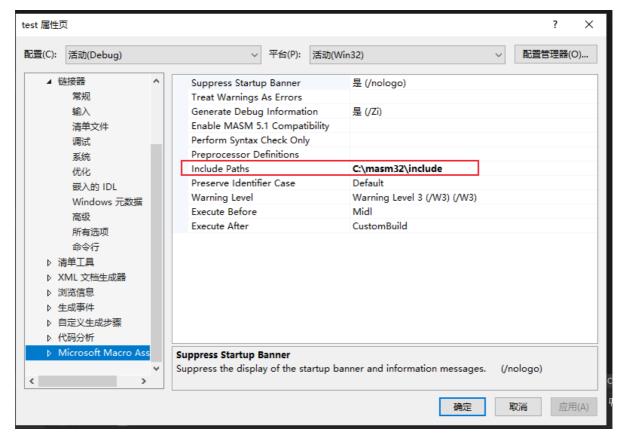


Figure 3-9

## 3.5 程序入口及子系统设置

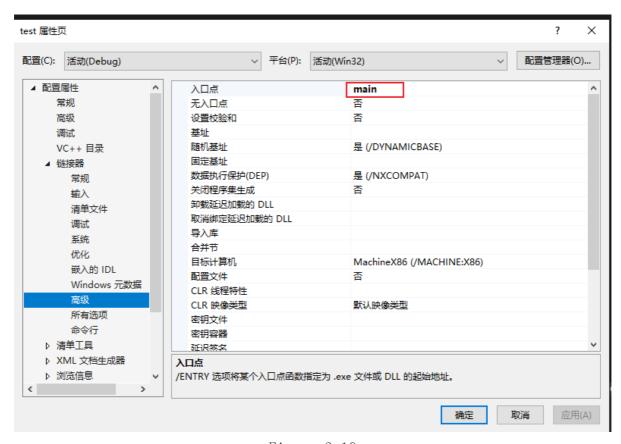


Figure 3-10

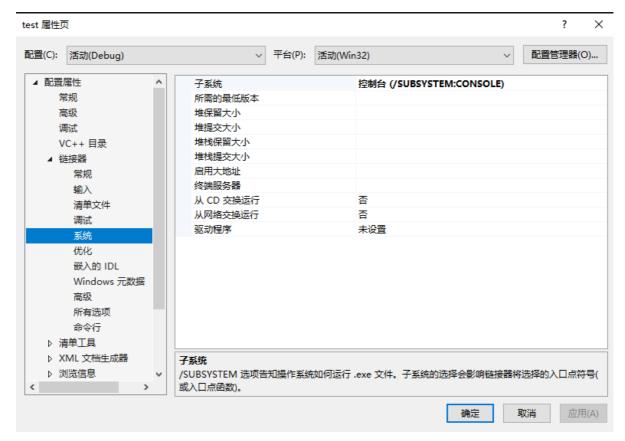


Figure 3-11

此处子系统选择凭个人喜好,我这里选择控制台,也可以选择窗口

# 4. VS插件下载

汇编代码高亮插件: Asm Dube

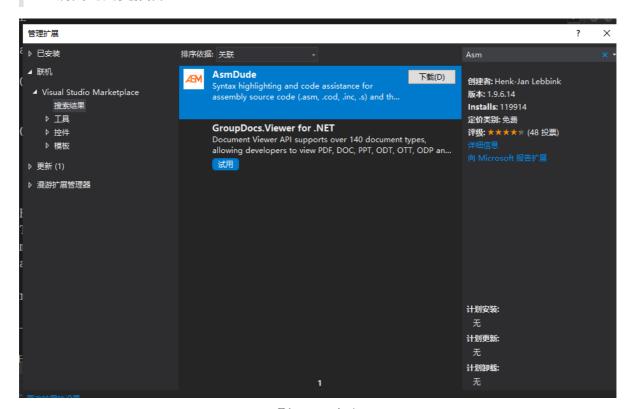


Figure 4-1

如果在线下载很慢,也可以尝试在github下载(<u>https://github.com/HJLebbink/asm-dude/releases</u>),选择对应版本下载即可

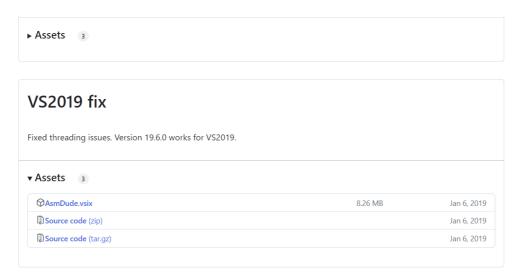


Figure 4-2

#### 我这里选择VS2019 fix版本安装失败

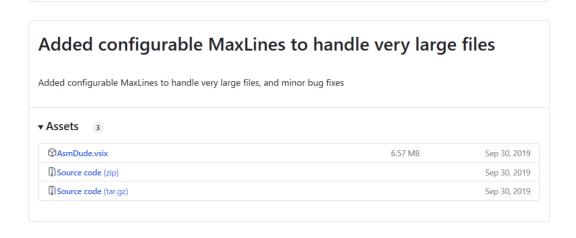


Figure 4-3

安装失败时,可以多尝试几个版本

下载vsix文件,之后双击安装即可

# 代码测试

```
1
    .386
2
    .model flat,stdcall
 3
    .stack 4096
4
 5
    .data
6
7
    ExitProcess PROTO, dwExitcode:dword
8
9
    .code
10
    main PROC
       mov eax, 1
11
12
       add eax, 2
13
       INVOKE ExitProcess, 0
14
15
   main ENDP
16
   END main
```

Fence 0-1

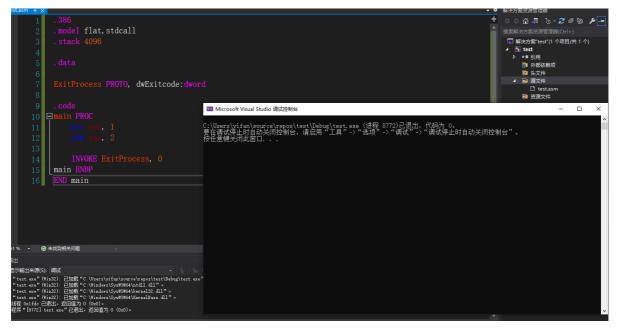


Figure 0-1

# 总配置说明

• 操作系统: Windows10

• VS版本: V2019

• 附加库: MASM32

• VS高亮插件: AsmDube