

## 汇编作业（一）

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**1、P58,38题，20个数据求连续多少个正字数据，多少个正双字数据**

思路：

通过循环即可

代码：

```
#include "pch.h"
#include <iostream>

int main()
{
    char s[21] = {
140,140,'a','a','a','a','a','a','a','a','a','a','a','a','a','a','a','a','a','a',0
};
    int word_num = 0, douword_num = 0;
    _asm {
        XOR EAX,EAX
        LEA EBX,s
        XOR ECX,ECX
        XOR EDX,EDX
        LOOP:
            CMP [EBX],0
            JE LOOPMOV TEN
            MOV CX,[EBX]
            CMP CX,0
            JLE INCRIG
            INC EAX
            INCRIG:
                INC EBX
                INC EBX
                JMP LOOP
            LOOPMOV TEN:
                MOV word_num,EAX
        XOR EAX, EAX
        LEA EBX, s
        XOR ECX, ECX
        XOR EDX, EDX
```

```

        LOOOP1:
            CMP [EBX], 0
            JE LOOOPMOVFFIVE
            MOV ECX, [EBX]
            CMP ECX, 0
            JLE INCDOURIG
            INC EAX

        INCDOURIG:
            INC EBX
            INC EBX
            INC EBX
            INC EBX
            JMP LOOOP1

        LOOOPMOVFFIVE:
            MOV douword_num, EAX
    }
    printf("十个字数据整数中正数有%d个，五个双字数据整数中正数有%d
个",word_num,douword_num);
    return 0;
}

```

运行结果：

The screenshot shows the Microsoft Visual Studio IDE. The main window displays the assembly code for the program, which is a mix of C and assembly. The assembly part includes labels like LOOOP, INCDOURIG, and LOOOPMOVFFIVE, corresponding to the assembly code shown in the first block. The output window at the bottom right shows the program's execution results, which are the same as the output shown in the second block.

```

1  // ConsoleApplication1.cpp : 此文件包含 "main" 函数。程序执行将在此处开始并结束。
2  //
3
4  #include "pch.h"
5  #include <iostream>
6
7  int main()
8  {
9      char s[21] = { 140, 140, 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 0 };
10     int word_num = 0, douword_num = 0;
11     _asm {
12         XOR EAX, EAX
13         LEA EBX, s
14         XOR ECX, ECX
15         XOR EDI, EDI
16         LOOOP:
17             CMP [EBX], 0
18             JE LOOOPMOVFFIVE
19
20             MOV ECX, [EBX]
21             CMP ECX, 0
22             JLE INCDOURIG
23             INC EAX
24
25         INCDOURIG:
26             INC EBX
27             INC EBX
28             INC EBX
29             INC EBX
30             JMP LOOOP
31
32         LOOOPMOVFFIVE:
33             MOV word_num, EAX
34     }
35     printf("十个字数据整数中正数有%d个，五个双字数据整数中正数有%d
36     个",word_num,douword_num);
37     return 0;
38 }

```

Microsoft Visual Studio 调试控制台

十个字数据整数中正数有9个，五个双字数据整数中正数有5个  
C:\Users\38138\Desktop\nuaa\汇编语言\myself\第一次作业\2-38\ConsoleApplication1\Debug\ConsoleApplication1.exe (进程ID: 1234) 已退出，返回代码为: 0。  
若要在调试停止时自动关闭控制台，请启用“工具”->“选项”->“调试”->“调试停止时自动关闭控制台”。  
按任意键关闭此窗口...