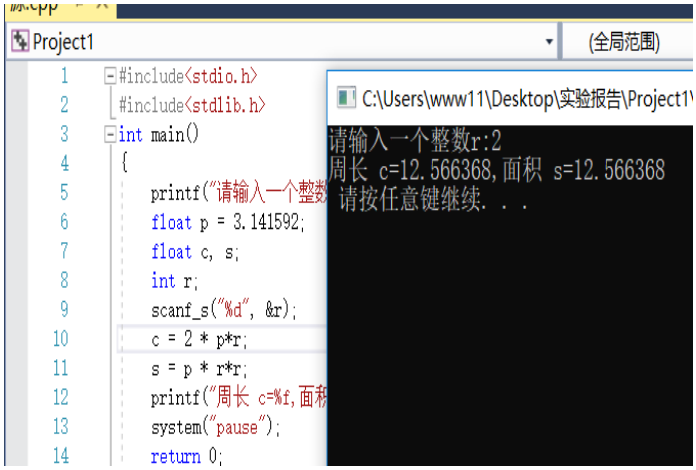
四. 实验结果与分析

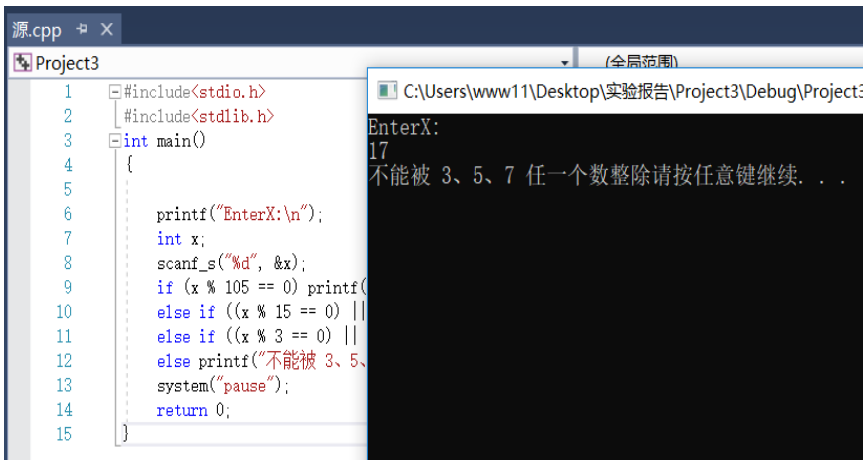
2-1 从键盘输入一个整数作为半径，求圆的周长和面积

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
    printf("请输入一个整数r:");
    float p = 3.141592;
    float c, s;
    int r;
    scanf_s("%d", &r);
     c = 2 * p*r;
    s = p * r*r;
    printf("周长 c=%f,面积 s=%f\n ",c,s);
    system("pause");
    return 0;
}
```



2-2 输入一个整数 x，判断 x 能否被 3、5、7 整除，并输出以下信息之一。

① 能同时被 3、5、7 整除； ② 能被其中两数整除； ③ 能被其中一个数整除； ④ 不能被 3、5、7 任一个数整除。




```
#include<stdio.h>
#include<stdlib.h>
int main()
{
    printf("EnterX:\n");
    int x;
    scanf_s("%d", &x);
    if (x % 105 == 0) printf("能同时被3，5，7数整除");
    else if ((x % 15 == 0) || (x % 35 == 0) || (x % 21 == 0))printf("能被其中两数整除");
    else if ((x % 3 == 0) || (x % 7 == 0) || (x % 5 == 0))printf("能被其中一个数整除");
    else printf("不能被 3、5、7 任一个数整除");
```

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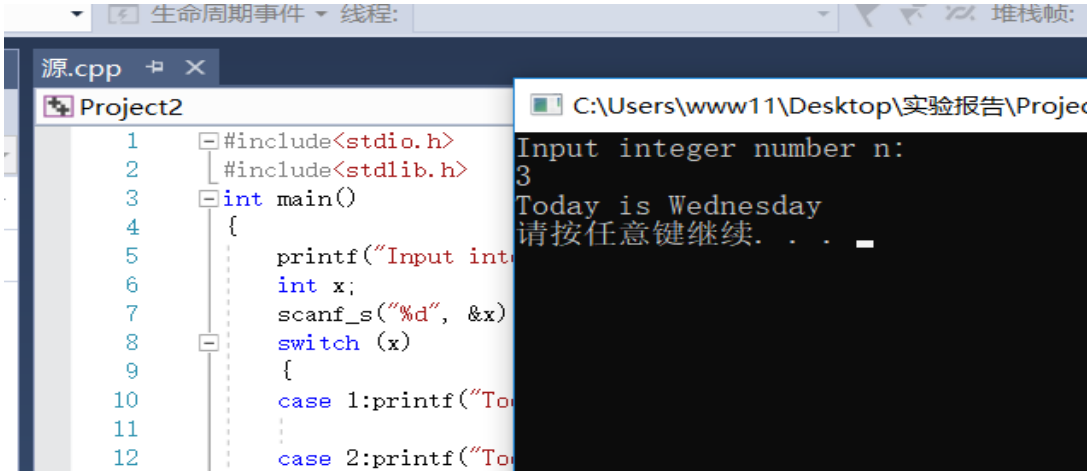
```
    system("pause");
    return 0;
}
```

2-3 输入一个 1~7 中的数字 n，输出对应的英文星期的单词（要求用 switch 语句）。




```
#include<stdio.h>
#include<stdlib.h>
int main()
{
    printf("Input integer number n:\n");
    int x;
    scanf_s("%d", &x);
    switch (x)
    {
    case 1:printf("Today is Monday \n"); break;

    case 2:printf("Today is Tuesday\n"); break;

    case 3:printf("Today is Wednesday \n"); break;

    case 4:printf("Today is Thursday\n"); break;

    case 5:printf("Today is  Friday\n"); break;

    case 6:printf("Today is Saturday\n"); break;

    case 7:printf("Today is Sunday\n"); break;
    default:printf(" day error\n");

    }
    system("pause");
    return 0;
}
```

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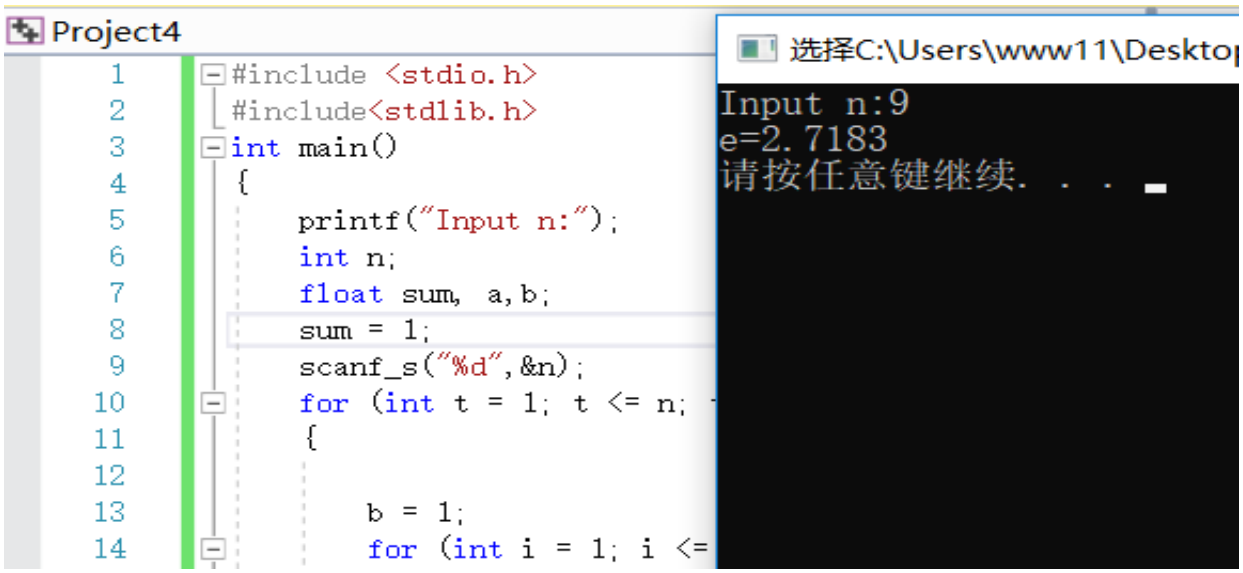
2-4 输入一个正整数 n，计算




```c
#include <stdio.h>
#include<stdlib.h>
int main()
{
    printf("Input n:");
    int n;
    float sum, a,b;
    sum = 1;
    scanf_s("%d",&n);
    for (int t = 1; t <= n; t++)
    {

        b = 1;
        for (int i = 1; i <= t; i++)
        {
            b = b * i;
        }
        a = 1 / b;
        sum = sum + a;
    }
    printf("e=%.4f\n",sum);
    system("pause ");
    return 0;
}
```