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>
                                                                                             (全局范围)
                                             🛂 Project1
#include<stdlib.h>
                                                1
                                                    =#include(stdio.h>
                                                                        C:\Users\www11\Desktop\实验报告\Project1\
                                                     #include(stdlib.h>
int main()
                                                    ∃int main()
                                                                          长 c=12.566368, 面积 s=12.566368
    printf("请输入一个整数r:");
                                                5
                                                        printf("请输入一个整
                                                                        请按任意键继续. . .
                                                6
                                                        float p = 3.141592;
    float p = 3.141592;
                                                        float c, s;
    float c, s;
                                                8
                                                        int r;
                                                9
                                                        scanf_s("%d", &r);
    int r;
                                                10
                                                         c = 2 * p*r;
    scanf s("%d", &r);
                                                11
                                                         s = p * r*r;
     c = 2 * p*r;
                                                12
                                                        printf("周长 c=%f,面和
                                                13
                                                        system("pause");
    s = p * r*r;
                                                14
                                                        return 0;
    printf("周长 c=%f,面积
s=\%f \ ", 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

```
源.cpp ፟ → X
不能被 3、5、7 任一个
                                                                  ▼ (全局范围)
                          ♣ Project3
                                 =#include<stdio.h>
                                                     III C:\Users\www11\Desktop\实验报告\Project3\Debug\Project
                                  #include(stdlib.h>
数整除。
                                 □int main()
                                                     不能被 3、5、7 任一个数整除请按任意键继续. . .
                              5
                                     printf("EnterX:\n");
                              8
                                     scanf_s("%d", &x);
#include<stdio.h>
                                     if (x % 105 == 0) printf
                              9
                             10
                                     else if ((x % 15 == 0) |
#include<stdlib.h>
                                     else if ((x % 3 == 0) ||
                                     else printf("不能被 3、5
                             12
int main()
                             13
                                     system("pause");
                             14
                                     return 0;
    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");
```

```
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)。

```
▼ 图 生命周期事件 ▼ 线程:
           源.cpp 增 ×
           🛂 Project2
                                           ■ C:\Users\www11\Desktop\实验报告\Projec
                     =#include<stdio.h>
                                          Input integer number n:
                      #include<stdlib.h>
                     □int main()
                                          Today is Wednesday
请按任意键继续....
                          printf("Input int
                          scanf_s("%d", &x)
                          switch (x)
                          case 1:printf("To
                          case 2:printf("To
#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;
}
```

2-4 输入一个正整数 n, 计算

```
Project4
                                           选择C:\Users\www11\Desktor
           =#include <stdio.h>
      1
                                          Input n:9
      2
             #include<stdlib.h>
                                          e=2. 7183
      3
           <u>⊟int</u> main()
                                          请按任意键继续.
      4
      5
                 printf("Input n:");
      6
                 int n;
      7
                 float sum, a,b;
      8
                 sum = 1;
      9
                 scanf_s("%d", &n);
                 for (int t = 1; t <= n;
     10
     11
     12
     13
                     b = 1;
                     for (int i = 1; i <=
     14
```

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