

作业参考

1、求100内奇数和

```
1 total = 0
2 for i in range(1, 100, 2):
3     total += i
4 print(total)
5
6 # 内建函数sum
7 print(sum(range(1, 100, 2)))
```

2、求100内斐波那契数列

```
1 a = 0 # f(0)
2 b = 1 # f(1)
3 while True:
4     print(b)
5     #a, b = b, a + b
6     x = a + b
7     a = b
8     b = x
9     if b >= 100:
10        break
```

3、求斐波那契数列第101项

```
1 a = 0 # f(0)
2 b = 1 # f(1)
3 count = 1
4 while True:
5     print(count, b)
6     a, b = b, a + b
7     if count >= 101:
8         break
9     count += 1
```

4、打印菱形

方法一、补空格

| 序号 | 前空格 | 星数 | 后空格 |
|----|-----|----|-----|
| 0 | 3 | 1 | 3 |
| 1 | 2 | 3 | 2 |
| 2 | 1 | 5 | 1 |
| 3 | 0 | 7 | 0 |
| 4 | 1 | 5 | 1 |
| 5 | 2 | 3 | 2 |
| 6 | 3 | 1 | 3 |

```
1 n = 7
2 e = n // 2
3 for i in range(-e, e + 1):
4     print(' ' * abs(i), '*' * (n - 2 * abs(i)), sep='')
```

方法二、字符串居中

```
1 n = 7
2 e = n // 2
3 for i in range(-e, n - e):
4     print("{:^{}}".format("*" * (n - 2 * abs(i)), n))
```