# 面向对象程序设计基础 第十四次作业

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## 验证部分

我先对程序输入格式进行说明: 输入1之后输入浮点数,输出该浮点数的二进制存储形式。 输入2直接输出非数的二进制存储形式。

### ▶ 首先我先测试 0 和"非数"等易于验证结果的案例

输入	输出
10	000000000000000000000000000000000000000
2	111111111111111000000000000000000000000

Double 类型变量一共有 64 位, 为 1 位符号位+11 位阶码+52 位位码, 恰与运行的结果相符。这里初步验证了程序的正确性。

### ▶ 其次,我再取正负整数一对对验证

输入	输出
11	001111111111000000000000000000000000000
1 -1	101111111111000000000000000000000000000
12	010000000000000000000000000000000000000
1 -2	110000000000000000000000000000000000000
1 4	010000000010000000000000000000000000000
1 -4	110000000010000000000000000000000000000
18	010000000100000000000000000000000000000
1 -8	110000000100000000000000000000000000000
1 15	010000000101110000000000000000000000000
1 -15	110000000101110000000000000000000000000
1 4096	010000010110000000000000000000000000000
1 -4096	110000001011000000000000000000000000000

### ▶ 再次,我取正负小数一对对验证

输入	输出
1 0.1	00111111101110011001100110011001100110011001100110011001101101
1 -0.1	10111111101110011001100110011001100110011001100110011001101101
1 0.01	001111111100001000111101011100001010001111
1 -0.01	10111111100001000111101011100001010001111
1 0.5	001111111110000000000000000000000000000
1 -0.5	101111111110000000000000000000000000000
1 0.25	001111111101000000000000000000000000000
1 -0.25	101111111101000000000000000000000000000

1 1314.1314	010000001001010010001000100001101000110110111000101
1 -1314.1314	110000001001010010001000100001101000110110111000101
1 1949.10	010000001001111001110100011001100110011001100110011001100110
1 -1949.10	110000001001111001110100011001100110011001100110011001100110

以上样例比较充分地验证了程序的正确性。