

一、启动 TestDemo.exe(Start the TestDemo.exe)

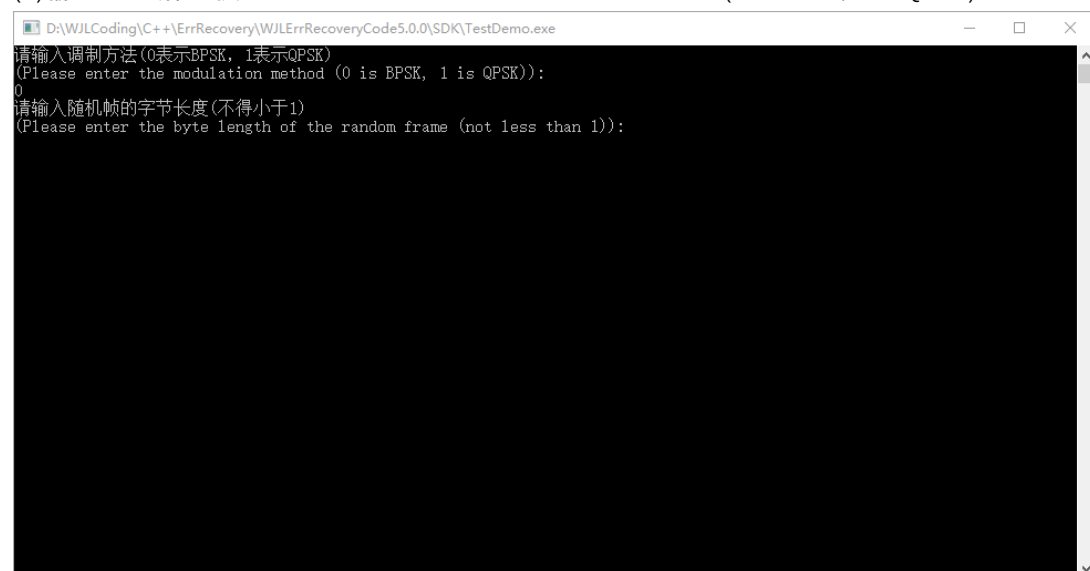
DllWJLErrRecoveryCode5.0.0.dll	2023/11/6 0:03	应用程序扩展	9 KB
LibWJLErrRecoveryCode5.0.0.lib	2023/11/6 0:03	Object File Library	131 KB
main.c	2023/11/5 23:34	C Source	2 KB
test.c	2023/11/4 23:56	C Source	20 KB
test.h	2023/10/23 11:31	C/C++ Header	1 KB
TestDemo.exe	2023/11/6 0:03	应用程序	31 KB
The use method of the TestDemo.docx	2023/11/7 10:30	Microsoft Word ...	13 KB
WJLErrRecoveryCore.h	2023/11/6 0:03	C/C++ Header	6 KB

也可以通过 test.h, test.c, 以及 LibWJLErrRecoveryCode5.x.0.lib 或 DllWJLErrRecoveryCode5.x.0.dll 等生成新的演示 demo。

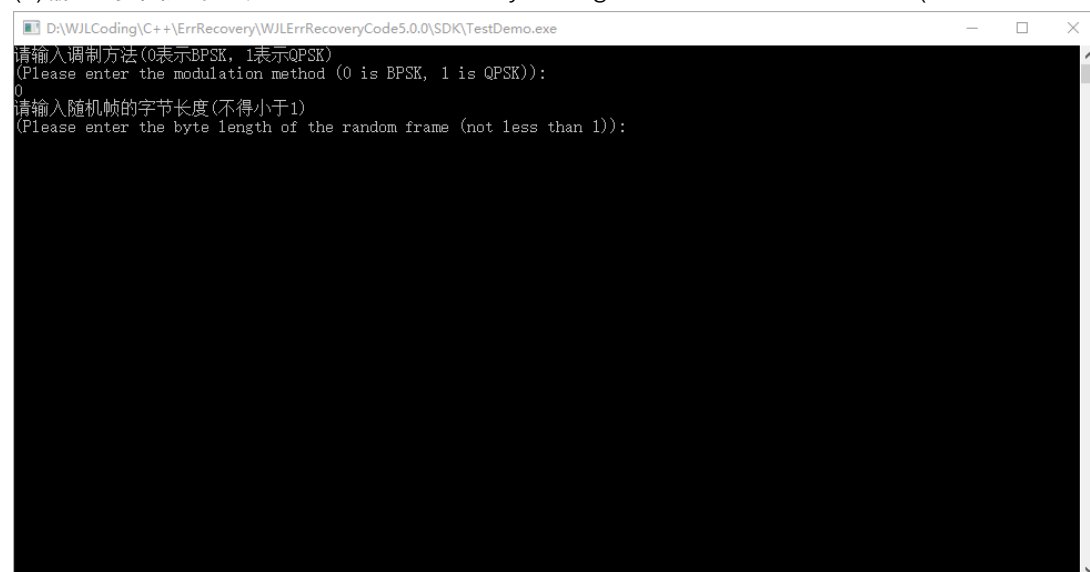
New demo can also be generated via test.h, test.c, and LibWJLErrRecoveryCode5.x.0.lib or DllWJLErrRecoveryCode5.x.0.dll, WJLErrRecoveryCore.h.

二、参数设置(parameter setting)

(1)输入调制解调模式 Please enter the modulation method (0 is BPSK, 1 is QPSK)



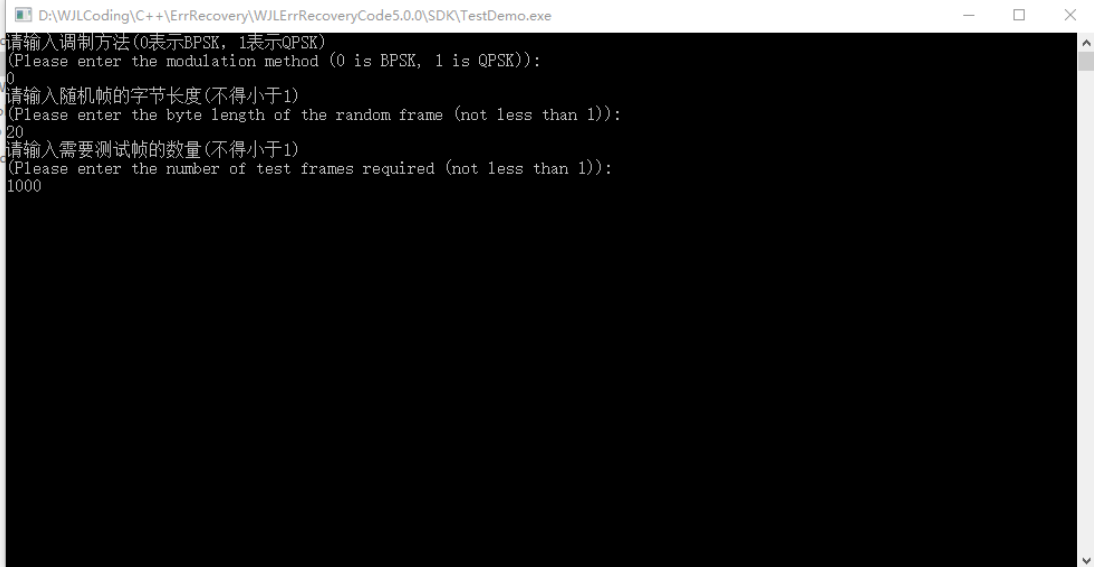
(2)输入每个帧的长度 Please enter the byte length of the random frame (not less than 1)



设置为 20 表示码率为 0.5，数值越大越接近 0.63。设置为 3 码率 0.25，设置为 6 码率为 0.3333，设置为 32 码率为 0.5424。

Setting to 20 indicates a bit rate of 0.5, with larger values being closer to 0.63. Is set to 3 yard rate to 0.25,6 yard rate to 0.3333 and 32 yard rate to 0.5424.

(3)输入的帧数 Please enter the number of test frames required (not less than 1)

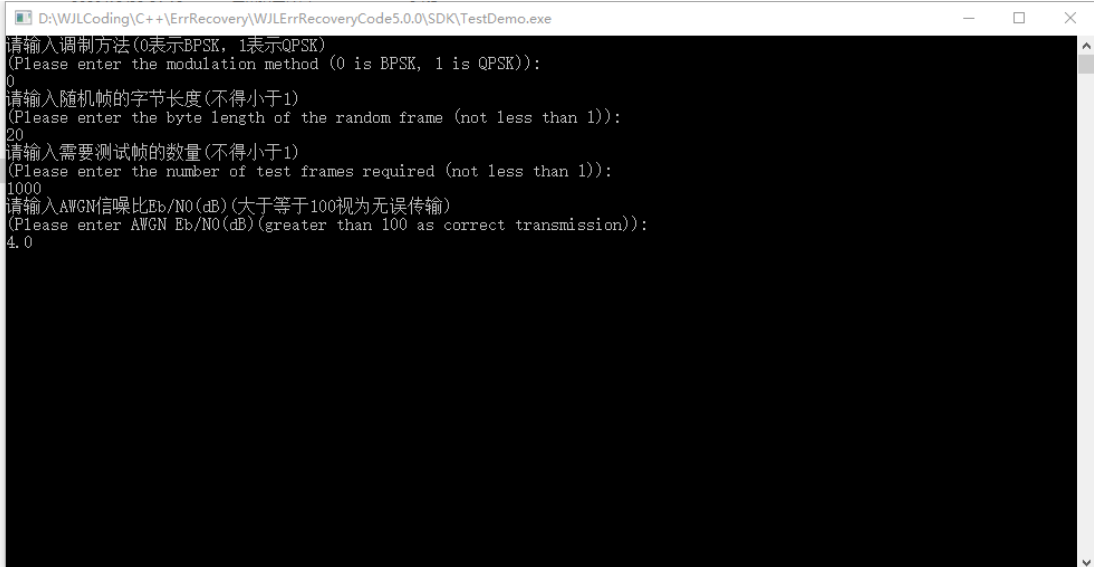


```
D:\WJLCoding\C++\ErrRecovery\WJErrRecoveryCode5.0.0\SDK\TestDemo.exe
请输入调制方法(0表示BPSK, 1表示QPSK)
(Please enter the modulation method (0 is BPSK, 1 is QPSK)):
0
请输入随机帧的字节长度(不得小于1)
(Please enter the byte length of the random frame (not less than 1)):
20
请输入需要测试帧的数量(不得小于1)
(Please enter the number of test frames required (not less than 1)):
1000
```

可以测试 1 帧数据，也可以测试 1000000 帧数据。

You can test 1 frame of data or 1000000 frames of data.

(4)输入的 AWGN 信噪比 E_b/N_0 (dB) 的值(Value of AWGN signal to noise ratio E_b / N_0 (dB) for the third input)



```
D:\WJLCoding\C++\ErrRecovery\WJErrRecoveryCode5.0.0\SDK\TestDemo.exe
请输入调制方法(0表示BPSK, 1表示QPSK)
(Please enter the modulation method (0 is BPSK, 1 is QPSK)):
0
请输入随机帧的字节长度(不得小于1)
(Please enter the byte length of the random frame (not less than 1)):
20
请输入需要测试帧的数量(不得小于1)
(Please enter the number of test frames required (not less than 1)):
1000
请输入AWGN信噪比Eb/N0(dB) (大于等于100视为无误传输)
(Please enter AWGN Eb/N0(dB)(greater than 100 as correct transmission)):
4.0
```

可以设置 1.0, 1.5 或 2.3, 4.5 等等，数值越小，仿真出现的错误越多，如 0.0 时可能需要话很长的时间纠错。

You can set 1.0,1.5 or 2.3,4.5 and so on. The smaller the value, the more errors will occur in the simulation. For example, at 0.0, it may take a long time to correct errors.

(5)输入的打印状态参数(The print state parameter for the fourth time of the input)

```
D:\WJLCoding\C++\ErrRecovery\WJLErrRecoveryCode5.0.0\SDK\TestDemo.exe
请输入调制方法 (0表示BPSK, 1表示QPSK)
(Please enter the modulation method (0 is BPSK, 1 is QPSK)):
0
请输入随机帧的字节长度 (不得小于1)
(Please enter the byte length of the random frame (not less than 1)):
20
请输入需要测试帧的数量 (不得小于1)
(Please enter the number of test frames required (not less than 1)):
1000
请输入AWGN信噪比Eb/N0(dB) (大于等于100视为无误传输)
(Please enter AWGN Eb/N0(dB)(greater than 100 as correct transmission)):
4.0
请输入是否打印随机数 (0不打印, 1打印)
(Please enter whether to print the random number (0 no print, 1 print)):
1
```

输入 0 表示不打印, 输入 1 表示打印, 打印可以看到整个纠错过程中随机数的产生、编码、纠错译码的过程。

Input 0 means no printing, input 1 means printing, printing can see the generation of random numbers, encoding and error correction decoding process throughout the error correction process.