

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

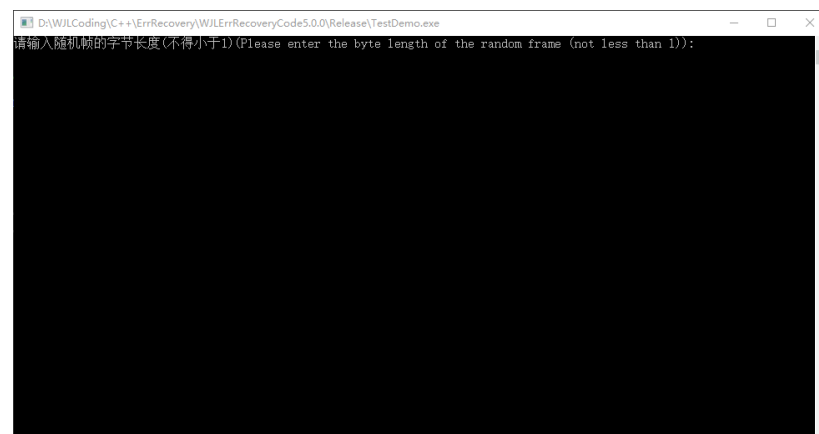
DllWJLErrRecoveryCode5.0.0.dll	2023/11/6 0:03	应用程序扩展	9 KB
LibWJLErrRecoveryCode5.0.0.lib	2023/11/6 0:03	Object File Library	131 KB
main.c	2023/11/5 23:34	C Source	2 KB
test.c	2023/11/4 23:56	C Source	20 KB
test.h	2023/10/23 11:31	C/C++ Header	1 KB
TestDemo.exe	2023/11/6 0:03	应用程序	31 KB
The use method 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 LibWJLErrRecoveryCode5.0.0.lib 或 DllWJLErrRecoveryCode5.0.0.dll 等生成新的演示 demo。

New demo can also be generated via test.h, test.c, and LibWJLErrRecoveryCode5.0.0.lib or DllWJLErrRecoveryCode5.0.0.dll, WJLErrRecoveryCore.h.

二、参数设置(parameter setting)

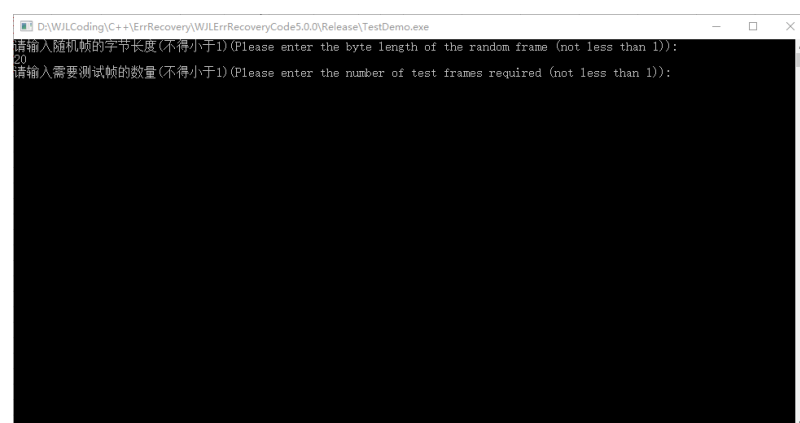
(1)启动后第一次输入的参数是每个帧的长度(The parameter input for the first time after startup is the length of each frame)



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.

(2) 第二次输入的帧数(Number of frames for the second input)



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.

(3) 第三次输入的 AWGN_BPSK 信噪比 E_b/N_0 (dB) 的值(Value of AWGN _ BPSK signal to noise ratio E_b / N_0 (dB) for the third input)

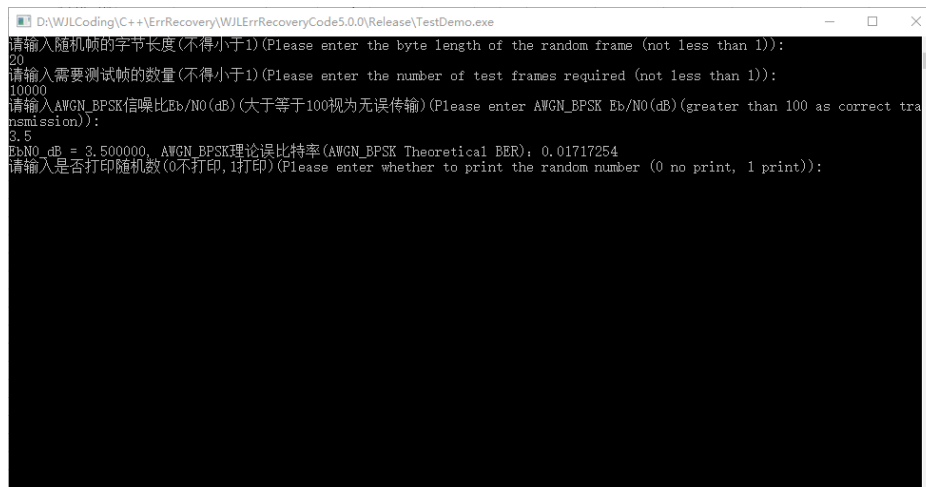


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D:\WJL\Coding\C++\ErrRecovery\WJLErrRecoveryCode5.0.0\Release\TestDemo.exe
请输入随机帧的字节长度(不得小于1)(Please enter the byte length of the random frame (not less than 1)):
20
请输入需要测试帧的数量(不得小于1)(Please enter the number of test frames required (not less than 1)):
10000
请输入AWGN_BPSK信噪比Eb/N0(dB) (大于等于100视为无误传输) (Please enter AWGN_BPSK Eb/N0(dB) (greater than 100 as correct transmission)):
```

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.

(4) 第四次输入的打印状态参数(The print state parameter for the fourth time of the input)



```
D:\WJL\Coding\C++\ErrRecovery\WJLErrRecoveryCode5.0.0\Release\TestDemo.exe
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)):
10000
请输入AWGN_BPSK信噪比Eb/N0(dB) (大于等于100视为无误传输) (Please enter AWGN_BPSK Eb/N0(dB) (greater than 100 as correct transmission)):
3.5
Eb/N0_dB = 3.500000, AWGN_BPSK理论误比特率(AWGN_BPSK Theoretical BER): 0.01717254
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)):
```

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.