

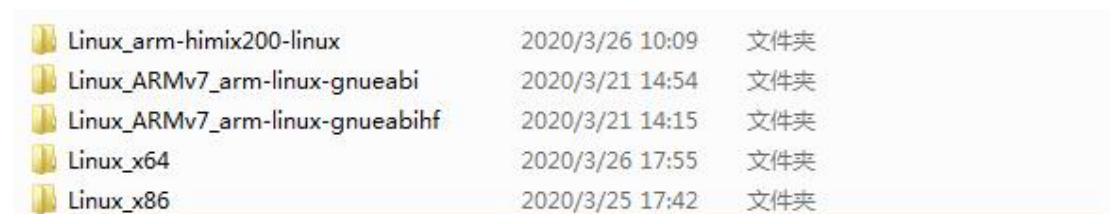
# Test Manual

Affirm:

This manual is for reading only by non-developers during testing. Developers can directly enter the Sample to call the example test.

Note that the content of the command is marked with red text. If there is no Linux foundation at all, please do not enter any wrong letter and distinguish between upper and lower case. Pay attention to spaces. After entering the command, you must add the Enter key to execute the command.

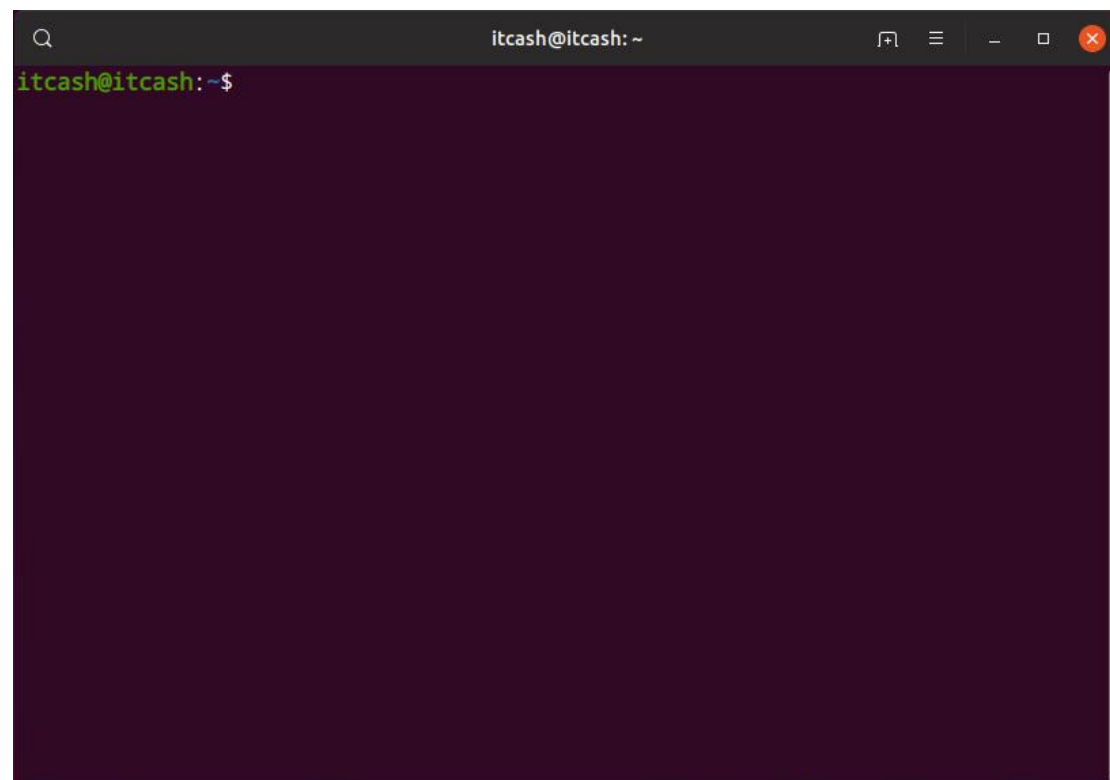
Step 1: Select the corresponding Linux version after decompression.



Linux_arm-himix200-linux	2020/3/26 10:09	文件夹
Linux_ARMv7_arm-linux-gnueabi	2020/3/21 14:54	文件夹
Linux_ARMv7_arm-linux-gnueabihf	2020/3/21 14:15	文件夹
Linux_x64	2020/3/26 17:55	文件夹
Linux_x86	2020/3/25 17:42	文件夹

Linux\_x64 and Linux\_x86 are PC platforms.

Step 2: Open command editor shell or bash.



Step 3: Type "ls" to view the directory location.

```
itcash@itcash: ~  
itcash@itcash:~$ ls  
公共的 模板 视频 图片 文档 下载 音乐 桌面 Linux_SDK project  
itcash@itcash:~$  
itcash@itcash:~$
```

Step 4: Type “**cd Linux\_SDK**”, then type “**ls**” to view the contents of the directory.

```
itcash@itcash: ~/  
itcash@itcash:~$ ls  
公共的 模板 视频 图片 文档 下载 音乐 桌面 Linux_SDK project  
itcash@itcash:~$  
itcash@itcash:~$ cd Linux_SDK/  
itcash@itcash:~/Linux_SDK$ ls  
Linux_arm-himix200-linux      Linux_ARMv7_arm-linux-gnueabihf  Linux_x86  
Linux_ARMv7_arm-linux-gnueabi Linux_x64  
itcash@itcash:~/Linux_SDK$
```

Step 5: Enter the corresponding platform version. In this example, the 64-bit PC is used for demonstration. Type “**cd Linux\_x64**”, then type “**ls**” to view the directory information.

```
itcash@itcash: ~/Linux_SDK/Linux_x64
ls
公共的 模板 视频 图片 文档 下载 音乐 桌面 Linux_SDK project
cd Linux_SDK/
ls
linux_arm-himix200-linux      Linux_ARMv7_arm-linux-gnueabihf  Linux_x86
Linux_ARMv7_arm-linux-gnueabi Linux_x64
cd Linux_x64/
ls
libCsnPrinterLibs QtDemo Sample
itcash@itcash:~/Linux_SDK/Linux_x64$
```

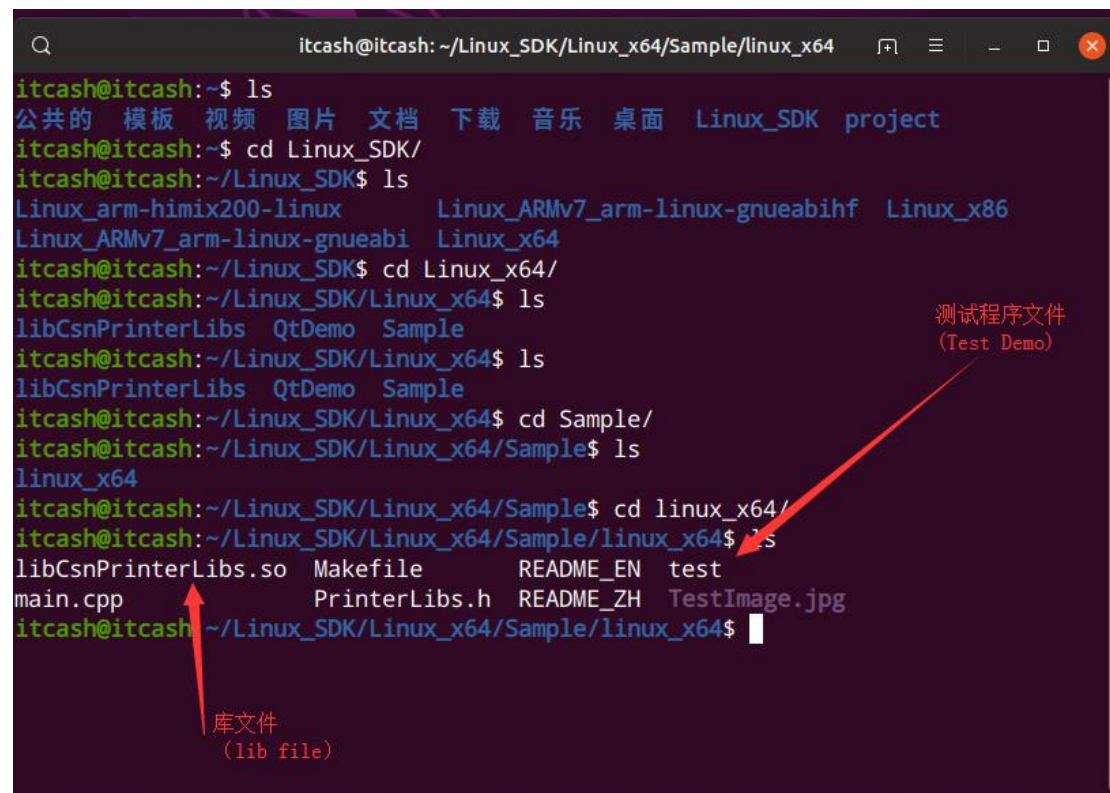
Step 6: Type “**cd Sample**”, then type “**ls**” to view the catalog file.

```
itcash@itcash: ~/Linux_SDK/Linux_x64/Sample
ls
公共的 模板 视频 图片 文档 下载 音乐 桌面 Linux_SDK project
cd Linux_SDK/
ls
Linux_arm-himix200-linux      Linux_ARMv7_arm-linux-gnueabihf  Linux_x86
Linux_ARMv7_arm-linux-gnueabi Linux_x64
cd Linux_x64/
ls
libCsnPrinterLibs QtDemo Sample
ls
libCsnPrinterLibs QtDemo Sample
cd Sample/
ls
linux_x64
itcash@itcash:~/Linux_SDK/Linux_x64/Sample$
```

Step 7: Type “**cd linux\_x64**”, then type “**ls**” to view the catalog file.

Test is a test program, and libCsnPrinterLibs.so is a library file. At this time, the test file is the same as other ordinary files, indicating that test does not have execution permission, and you

need to give test execution permission.

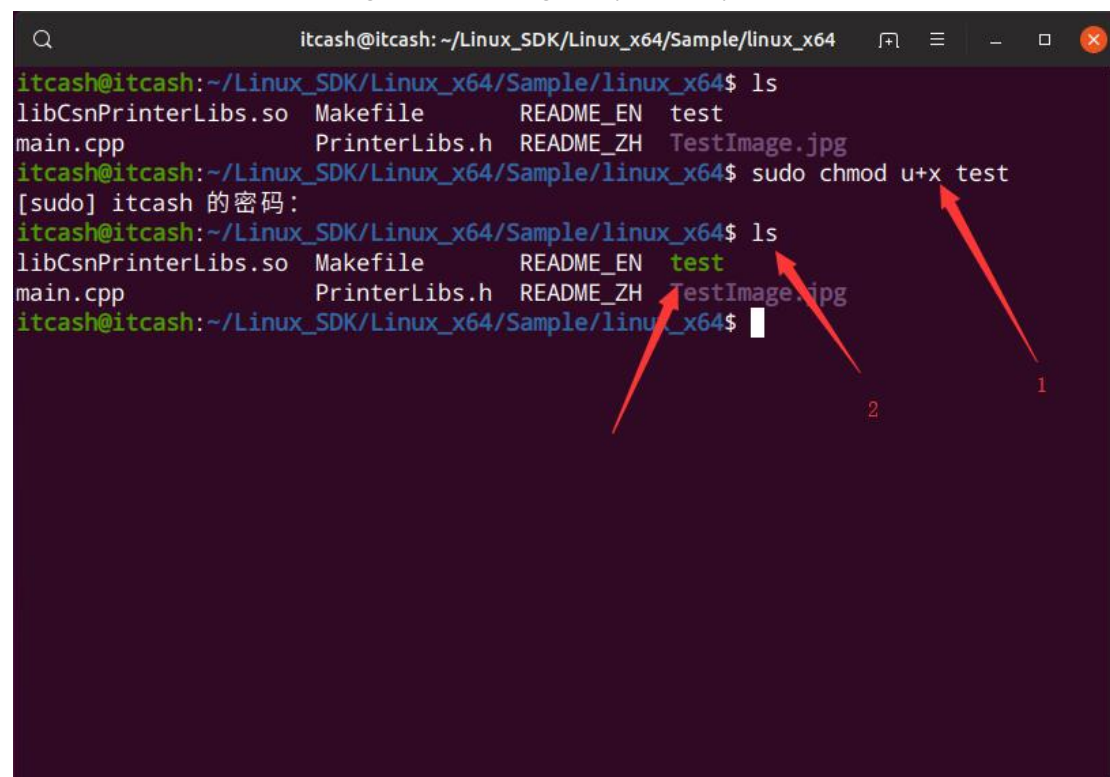


```
itcash@itcash: ~/Linux_SDK/Linux_x64/Sample/linux_x64
itcash@itcash:~$ ls
公共的 模板 视频 图片 文档 下载 音乐 桌面 Linux_SDK project
itcash@itcash:~$ cd Linux_SDK/
itcash@itcash:~/Linux_SDK$ ls
Linux_arm-himix200-linux      Linux_ARMv7_arm-linux-gnueabihf  Linux_x86
Linux_ARMv7_arm-linux-gnueabi  Linux_x64
itcash@itcash:~/Linux_SDK$ cd Linux_x64/
itcash@itcash:~/Linux_SDK/Linux_x64$ ls
libCsnPrinterLibs QtDemo Sample
itcash@itcash:~/Linux_SDK/Linux_x64$ cd Sample/
itcash@itcash:~/Linux_SDK/Linux_x64/Sample$ ls
linux_x64
itcash@itcash:~/Linux_SDK/Linux_x64/Sample$ cd linux_x64/
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH  TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$
```

库文件  
(lib file)

测试程序文件  
(Test Demo)

Step 8: Type “`sudo chmod u+x test`” and then enter the password and then press Enter. Type “`ls`” and find that the test turns green, indicating that you have permission to run.



```
itcash@itcash: ~/Linux_SDK/Linux_x64/Sample/linux_x64
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH  TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ sudo chmod u+x test
[sudo] itcash 的密码:
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH  TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$
```

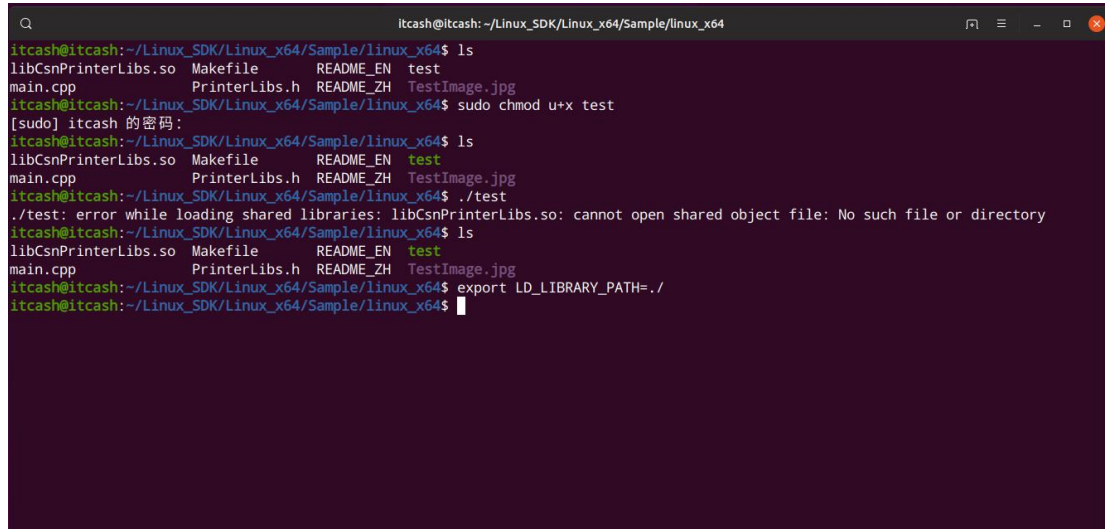
1

2

3

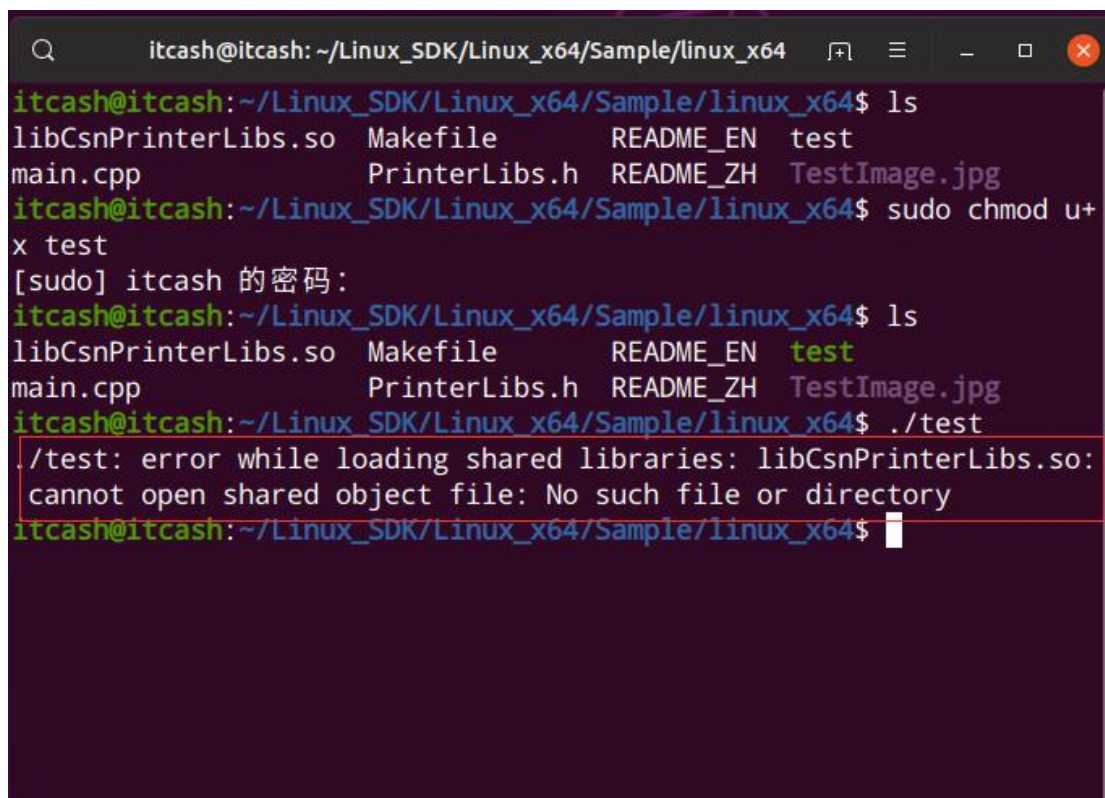


Step 9: Type “**export LD\_LIBRARY\_PATH = ./**” to tell the system to search the library path. This command is valid for a single time. It needs to be re-entered to log out or restart the system. If the command does not report an error, the input is correct.



```
itcash@itcash: ~/Linux_SDK/Linux_x64/Sample/linux_x64
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ sudo chmod u+x test
[sudo] itcash 的密码:
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ./test
./test: error while loading shared libraries: libCsnPrinterLibs.so: cannot open shared object file: No such file or directory
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ export LD_LIBRARY_PATH=./
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$
```

If the library path is not found, it will prompt something similar to the following. Need to re-type “**export LD\_LIBRARY\_PATH = ./**”.



```
itcash@itcash: ~/Linux_SDK/Linux_x64/Sample/linux_x64
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ sudo chmod u+
x test
[sudo] itcash 的密码:
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ./test
./test: error while loading shared libraries: libCsnPrinterLibs.so:
cannot open shared object file: No such file or directory
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$
```

Step 10: Give read and write permissions to the port. In this example, use the virtual serial port as an example. Type “**sudo chmod 777 /dev/ttyUSB0**” and enter the password. It should be noted that you need to determine which interface the serial port is connected to on the printer. The serial port and USB virtual serial port are usually / dev / ttyXXX and / dev / ttyUSBX, the USB print port is usually / dev / usb / lp / xxx, and the parallel port is usually / dev / lp / xxx. (The USB print

port and the USB virtual serial port PL2303 must be recognized without simplification of the system. If simplified, please re-compile the corresponding driver into the system). The running format of test is ./test port, baud rate / network port number, and the third parameter is not required for the USB print port and parallel port. In this example, the virtual serial port is used as an example. Type “./test /dev/ttyUSB0 9600”, the printer starts printing.



```
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ./test /dev/ttyUSB0 9600
Start text printing in 3 seconds
Print Successful!!
Close /dev/ttyUSB0 Port
This is the end of basic operation. Thank you for using our printer
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$
```

Annotations in the image:

- Red arrow pointing to `./test`: 执行文件 (Executable file)
- Red arrow pointing to `/dev/ttyUSB0`: 端口 (Port)
- Red arrow pointing to `9600`: 波特率或者网络端口, USB打印口和并口不用填写 (Baud rate or network port, USB print port and parallel port do not need to be filled in)

Printing effect: If there are garbled characters, the printer does not support Japanese and Korean.

Self Test  
測試小票  
テストシート

welcome to use

欢迎使用我司打印机

歡迎使用印表機

ご利用を歓迎する

Test BarCode



1 2 3 4 5 6

Test QRCode



Test Double QRCode  
Self Test測試小票



If there is no permission, or the port is opened incorrectly, the following content will be prompted.

```

itcash@itcash: ~/Linux_SDK/Linux_x64/Sample/linux_x64
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ sudo chmod u+x test
[sudo] itcash 的密码:
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ./test
./test: error while loading shared libraries: libCsnPrinterLibs.so: cannot open shared object file: No such file or directory
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  Makefile      README_EN  test
main.cpp             PrinterLibs.h README_ZH   TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ export LD_LIBRARY_PATH=./
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ls
libCsnPrinterLibs.so  main.cpp  Makefile  PrinterLibs.h  README_EN  README_ZH  test  TestImage.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ ./test /dev/ttyUSB0 9600
Can not open port, you can use sudo to retry.
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$

```

As a supplementary note, during USB connection, if the corresponding port cannot be found under / dev /, please type the “lsusb” command to see if there is currently a USB connected to the system. The ID is 067b: 2303 is our virtual serial port, and the ID is 0fe6: 811e is our USB print port. If these two are not recognized, it is not a system driver problem, and you need to troubleshoot the hardware problem.

```

itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 005: ID 067b:2303 Prolific Technology, Inc. PL2303 Serial Port
Bus 002 Device 004: ID 0e0f:0008 VMware, Inc.
Bus 002 Device 003: ID 0e0f:0002 VMware, Inc. Virtual USB Hub
Bus 002 Device 002: ID 0e0f:0003 VMware, Inc. Virtual Mouse
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
itcash@itcash:~/Linux_SDK/Linux_x64/Sample/linux_x64$

```

Others: We have also developed a convenient testing tool for the corresponding graphical interface version under the PC version of Linux with a graphical interface. But you also need to have read and write access to the port and Demo to run. The following is a brief description.

1. Go to the QtDemo directory of the SDK and type “cd Linux\_SDK /Linux\_x64/QtDemo/”

```

公共的 模板 视频 图片 文档 下载 音乐 桌面 Linux_SDK project
itcash@itcash:~$ cd Linux_SDK/Linux_
Linux_arm-himix200-linux/      Linux_ARMv7_arm-linux-gnueabi/ Linux_x86/
Linux_ARMv7_arm-linux-gnueabi/ Linux_x64/
itcash@itcash:~$ cd Linux_SDK/Linux_x64/QtDemo/
itcash@itcash:~/Linux_SDK/Linux_x64/QtDemo$ ls
CsnPrinterDemo  time2.jpg

```

2. Give QtDemo execution permission, type “sudo chmod u+x CsnPrinterDemo” and enter the password

```

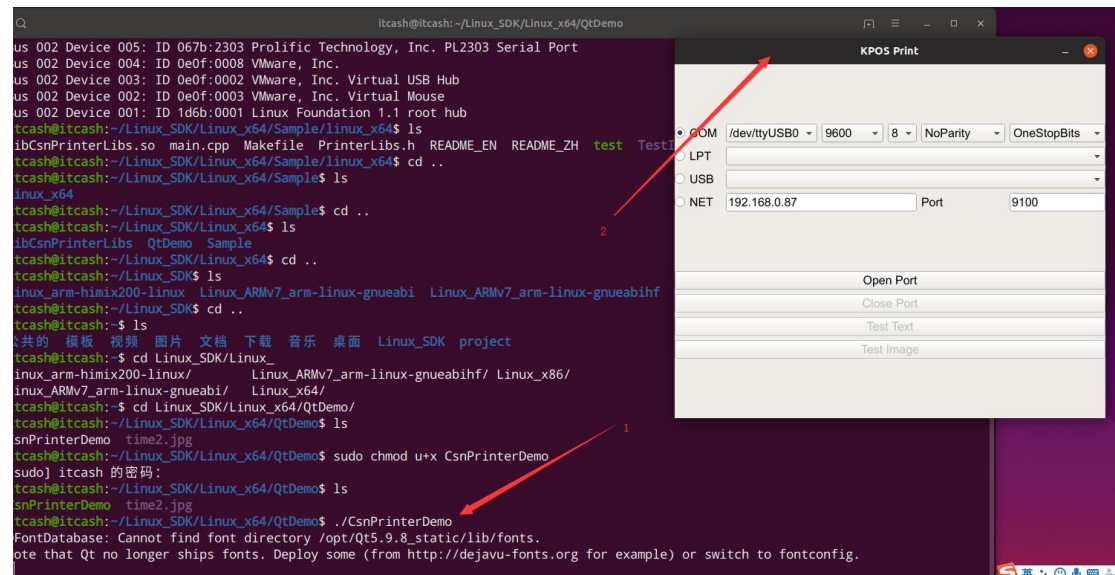
itcash@itcash:~/Linux_SDK/Linux_x64/QtDemo$ ls
CsnPrinterDemo  time2.jpg
itcash@itcash:~/Linux_SDK/Linux_x64/QtDemo$ sudo chmod u+x CsnPrinterDemo
[sudo] itcash 的密码:
itcash@itcash:~/Linux_SDK/Linux_x64/QtDemo$

```

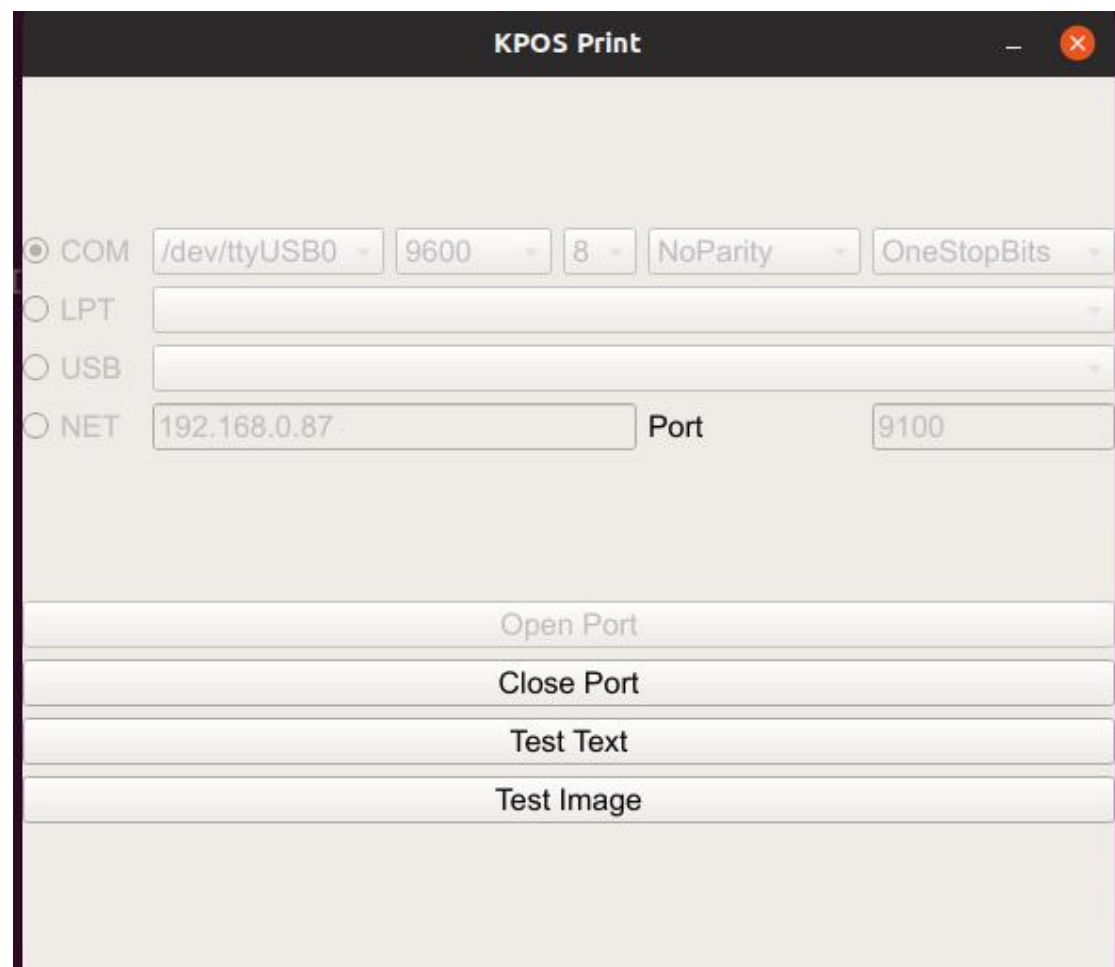


3. To grant read and write permissions to the port, type “**sudo chmod 777 /dev/ttyUSB0**” (Please note that this is an example, please use the actual corresponding port).

4. Open the corresponding QtDemo “**./CsnPrinterDemo**”



5. Select the corresponding port, click Open Port to open the port and click Test Text



6. If there is no corresponding port, please reopen the test software.

