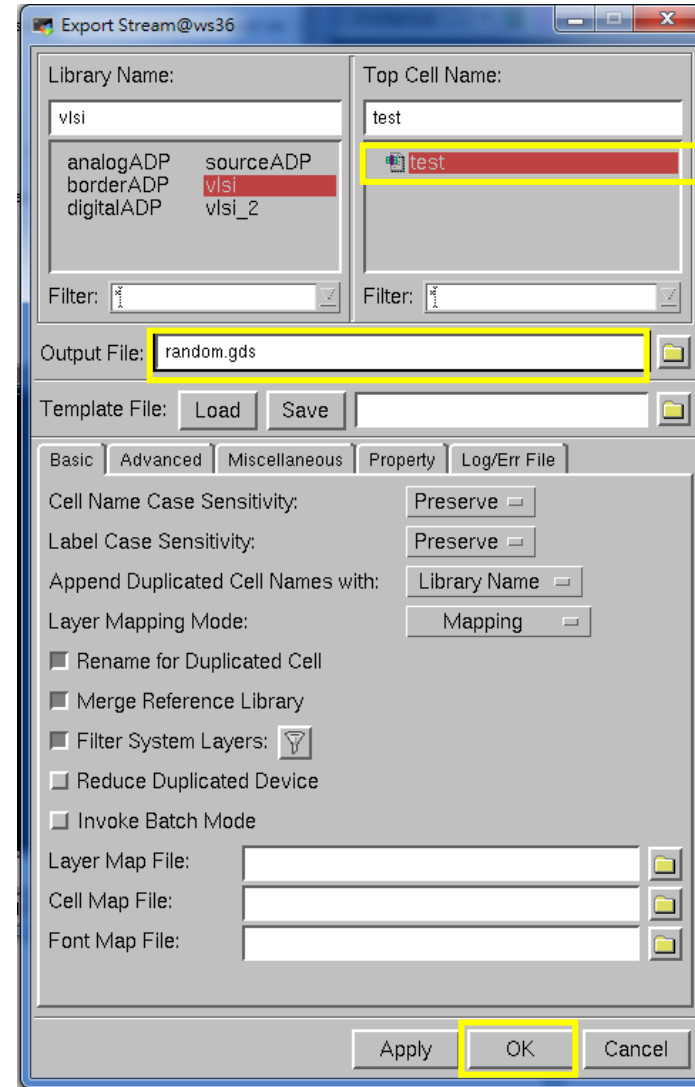
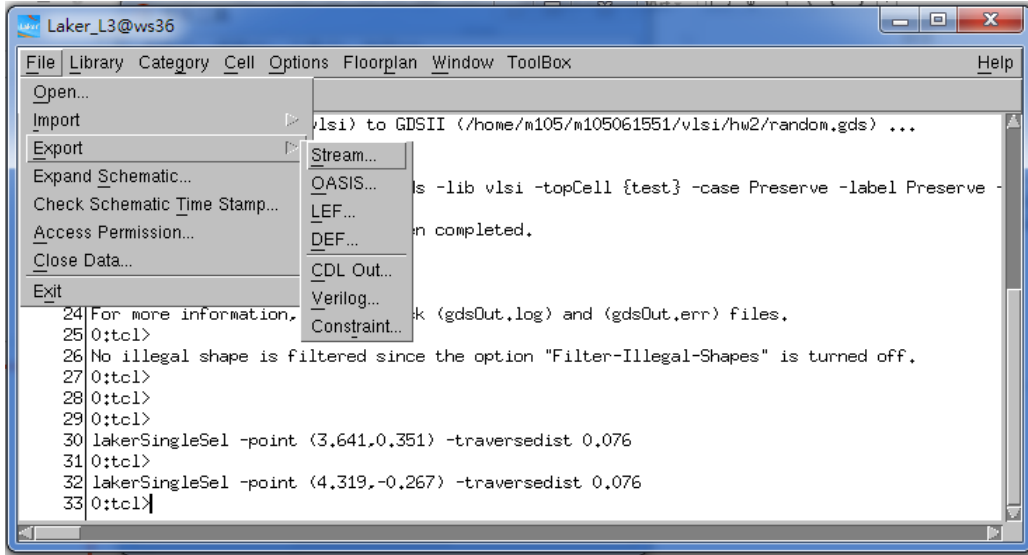


Run DRC/LVS

以下介紹如何用command line執行DRC/LVS

先將畫好的Layout轉成gds file

File → Export → Stream...



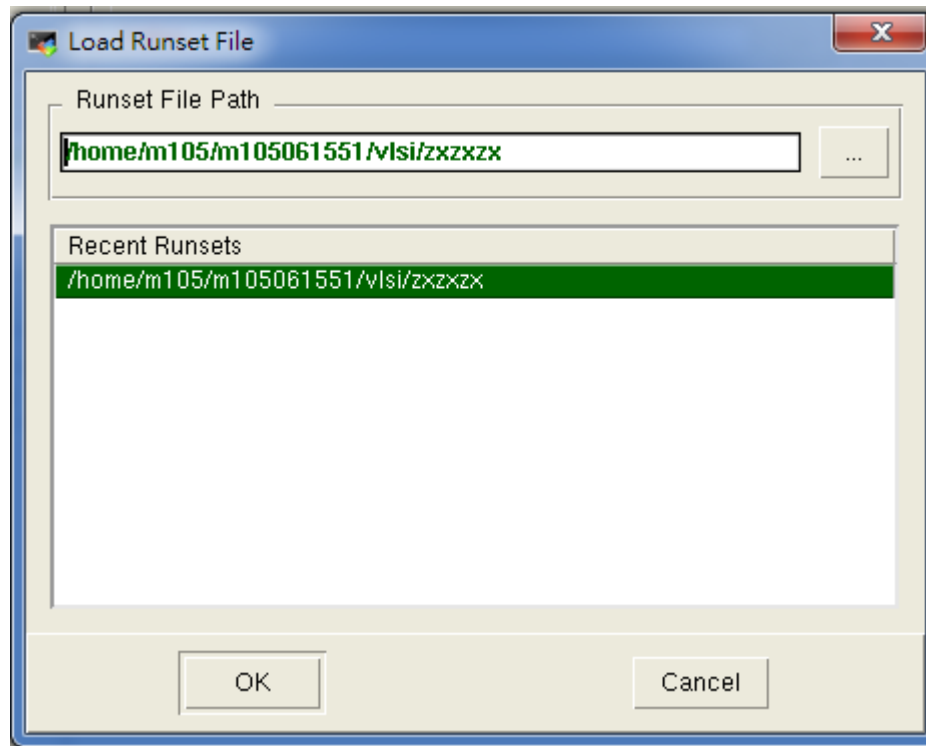
此為你的top cell
Top cell name為test

輸出檔名為xxx.gds

在command line叫出DRC的gui

```
/// All Rights Reserved.
/// THIS WORK CONTAINS TRADE SECRET AND PROPRIETARY INFORMATION
/// WHICH IS THE PROPERTY OF MENTOR GRAPHICS CORPORATION
/// OR ITS LICENSORS AND IS SUBJECT TO LICENSE TERMS.
///
/// The registered trademark Linux is used pursuant to a sublicense from LMI, th
/// exclusive licensee of Linus Torvalds, owner of the mark on a world-wide basi
///
/// Mentor Graphics software executing under x86-64 Linux
///
/// Running on Linux ws36 3.10.0-514.26.2.el7.x86_64 #1 SMP Tue Jul 4 15:04:05 U
C 2017 x86_64
/// 64 bit virtual addressing enabled
///
/// Starting time: Mon Oct 29 21:59:08 2018
///
/// calinteractive license acquired.
/// Calibre Interactive authorized.
[m105061551@ws36 hw2]$
[m105061551@ws36 hw2]$
[m105061551@ws36 hw2]$ calibre -gui -drc
```

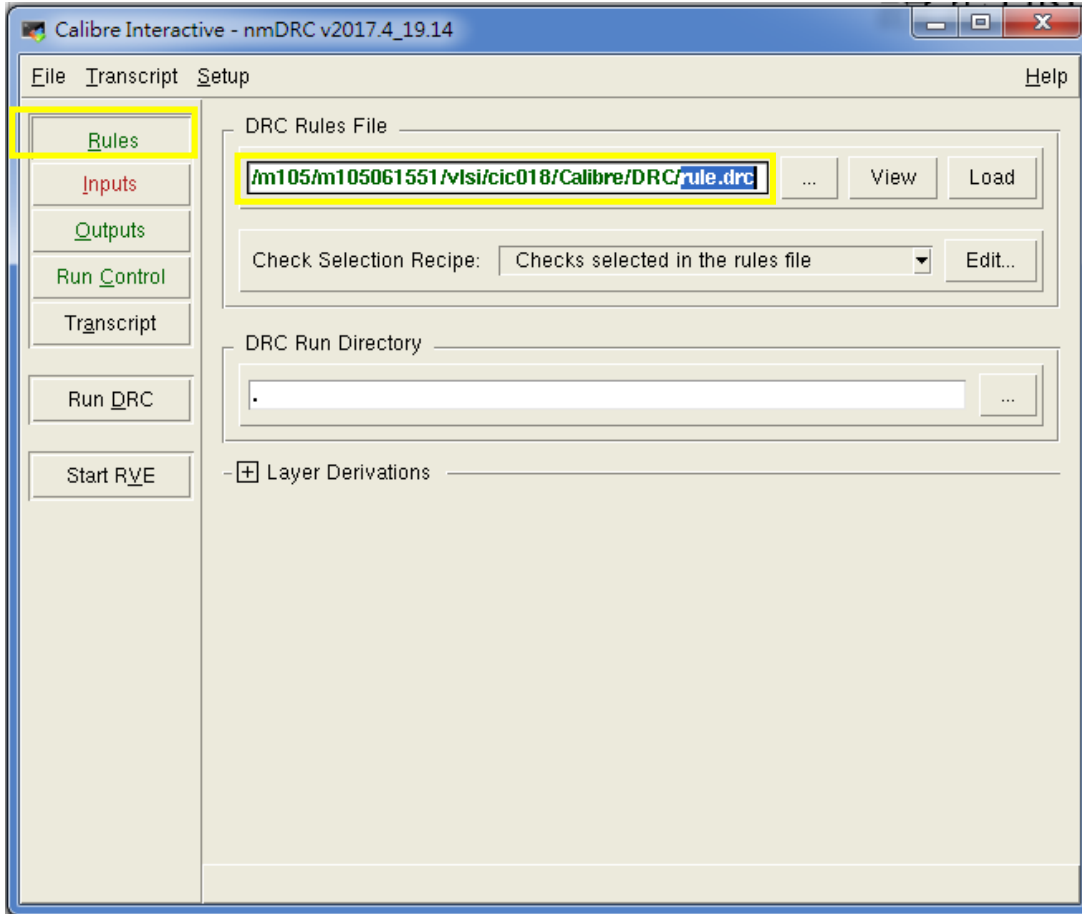
Calibre -gui -drc &



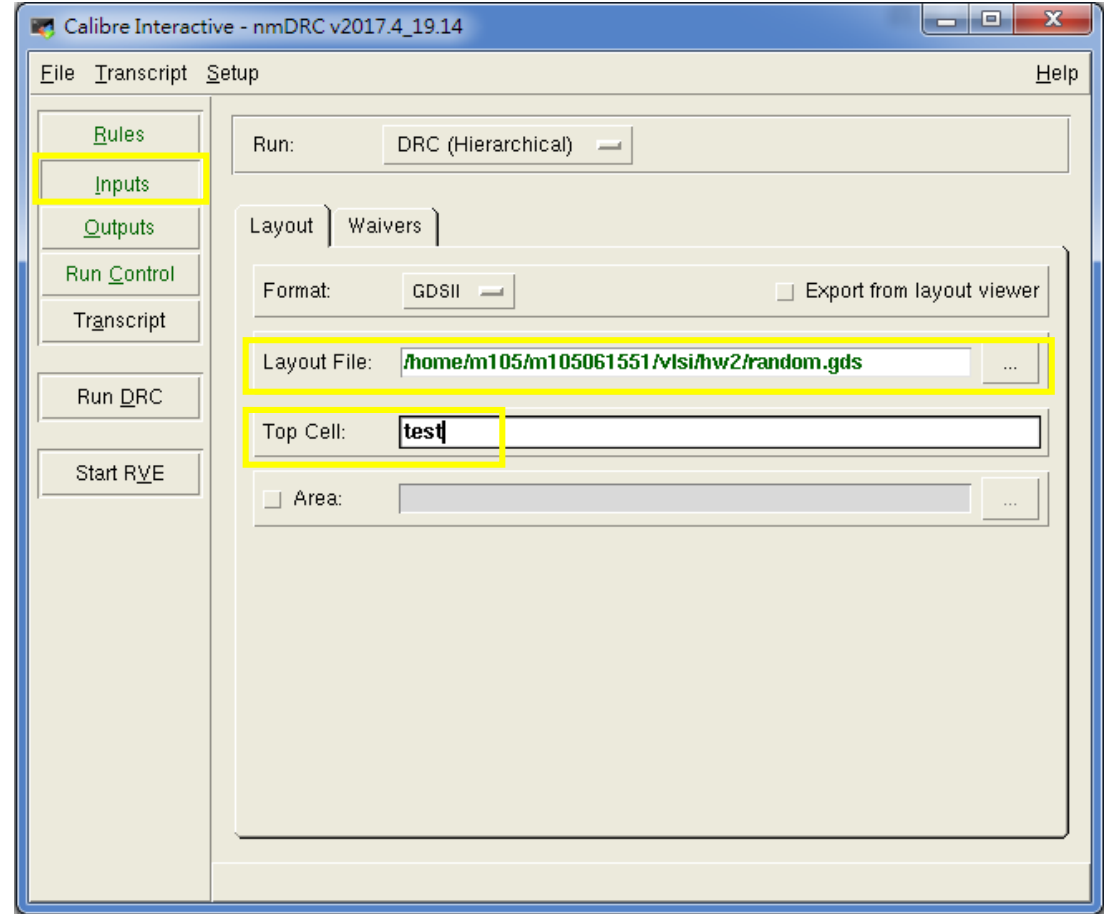
關掉這個

設定DRC環境

在Rules標籤下，DRC Rules File選擇: rule.drc(之前給過的rule檔)



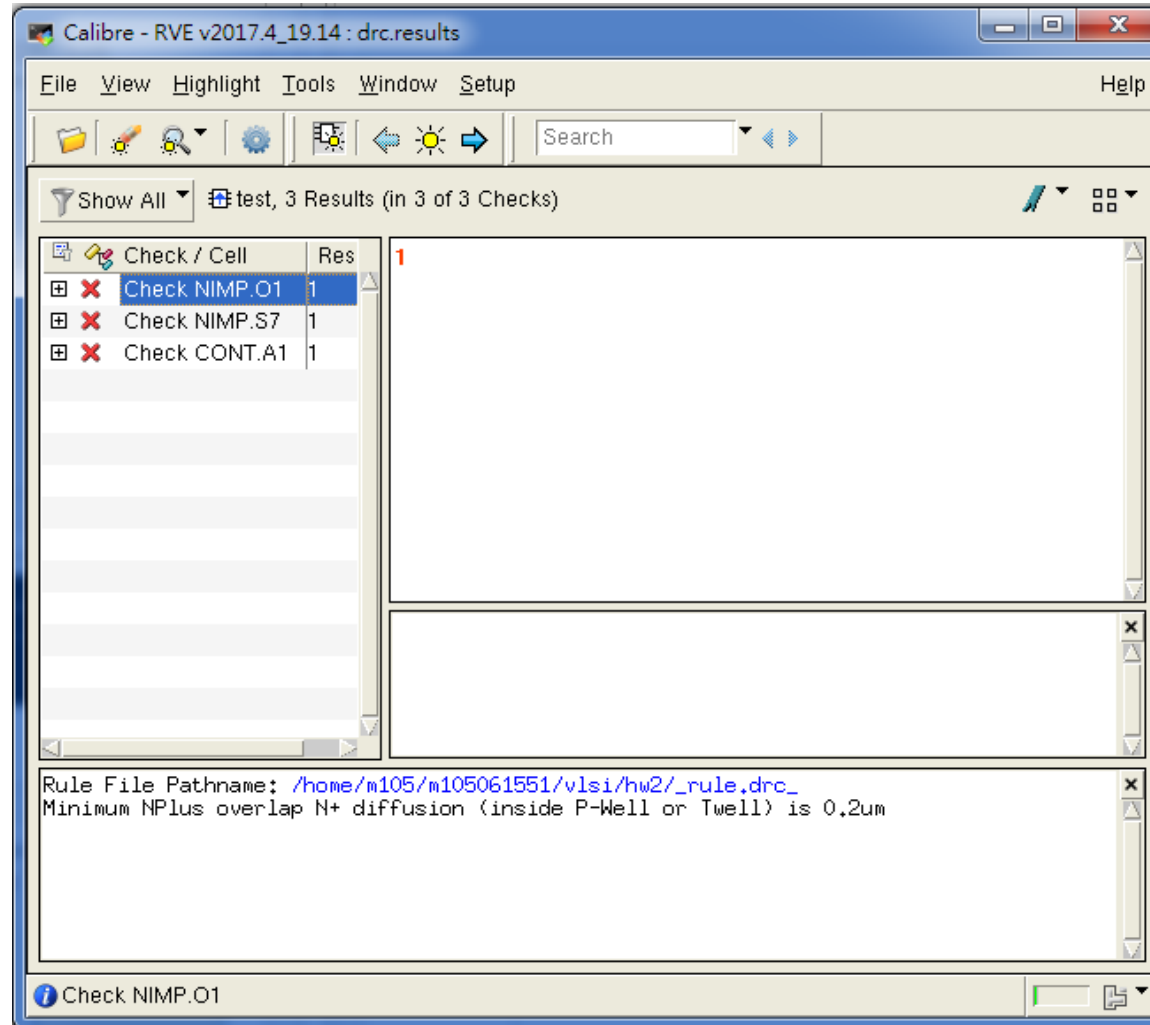
在Inputs標籤下，Layout File選擇剛才轉出的gds檔，Top Cell 為top cell name(test)



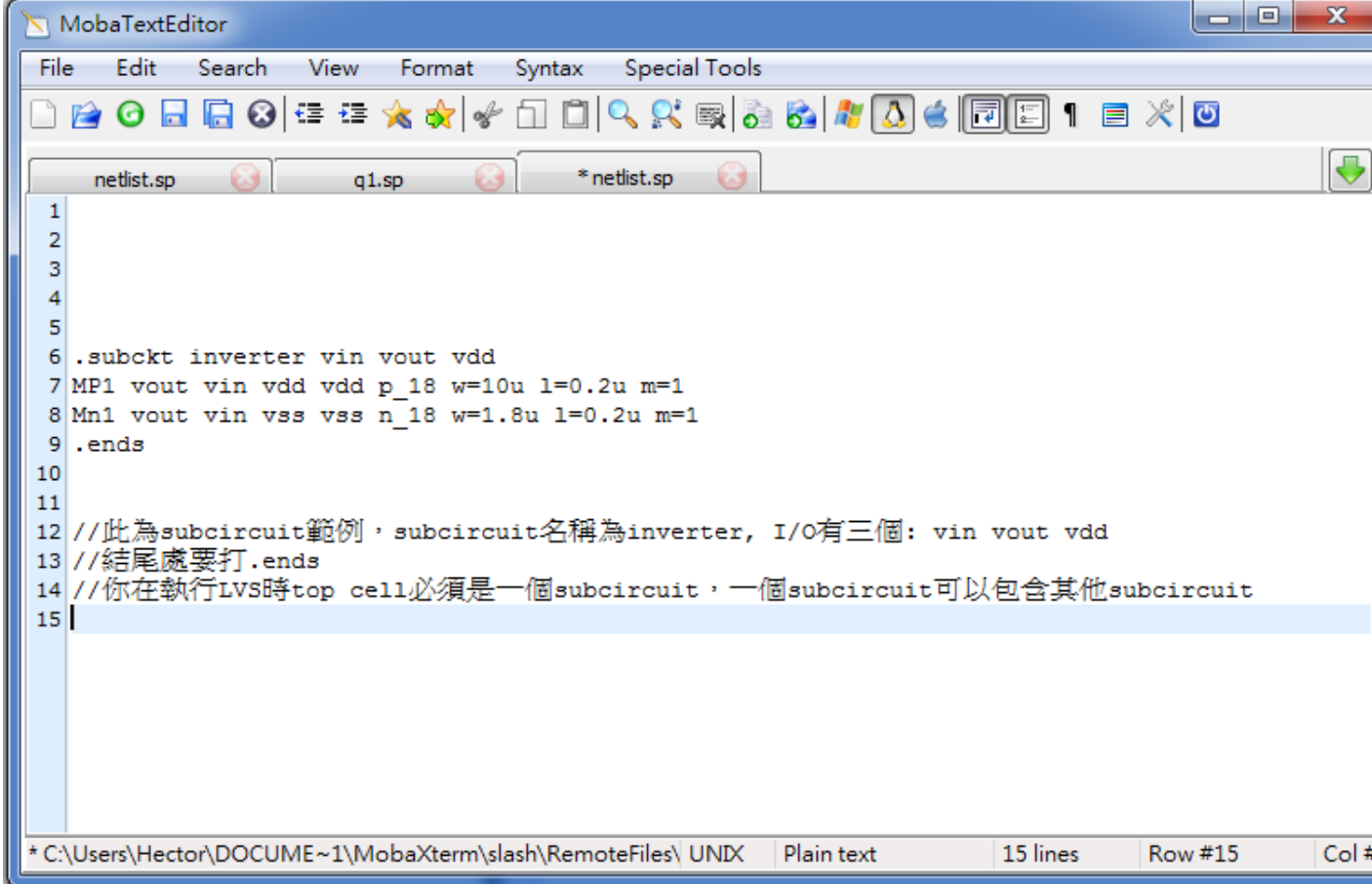
然後就可以run了

DRC result

請做到DRC Clean(下面這張沒有clean)



先將要做LVS的電路檔改成subcircuit的形式



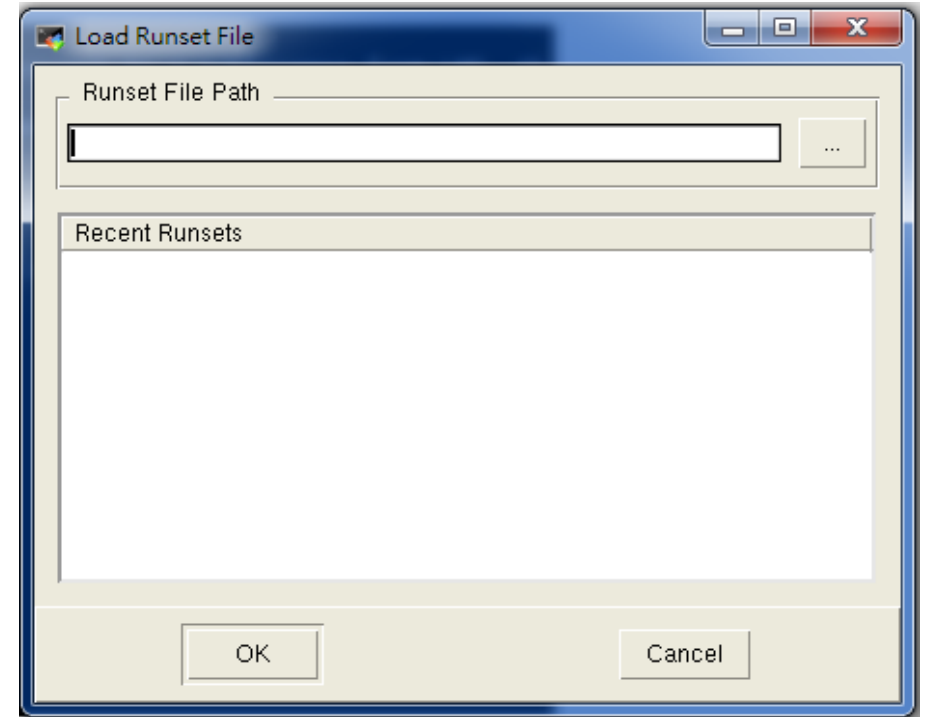
```
1
2
3
4
5
6 .subckt inverter vin vout vdd
7 MP1 vout vin vdd vdd p_18 w=10u l=0.2u m=1
8 Mn1 vout vin vss vss n_18 w=1.8u l=0.2u m=1
9 .ends
10
11
12 //此為subcircuit範例，subcircuit名稱為inverter，I/O有三個：vin vout vdd
13 //結尾處要打.ends
14 //你在執行LVS時top cell必須是一個subcircuit，一個subcircuit可以包含其他subcircuit
15
```

* C:\Users\Hector\DOCUME~1\MobaXterm\slash\RemoteFiles\ UNIX Plain text 15 lines Row #15 Col #

在command line叫出LVS的gui

```
// The registered trademark Linux is used pursuant to a sublicense from LMI, the
// exclusive licensee of Linus Torvalds, owner of the mark on a world-wide basis.
// Mentor Graphics software executing under x86-64 Linux
// Running on Linux ws36 3.10.0-514.26.2.el7.x86_64 #1 SMP Tue Jul 4 15:04:05 UTC
// 2017 x86_64
// 64 bit virtual addressing enabled
// Starting time: Mon Oct 29 22:23:21 2018
//
^C
[m105061551@ws36 hw2]$
[m105061551@ws36 hw2]$ calibre -gui -lvs &
```

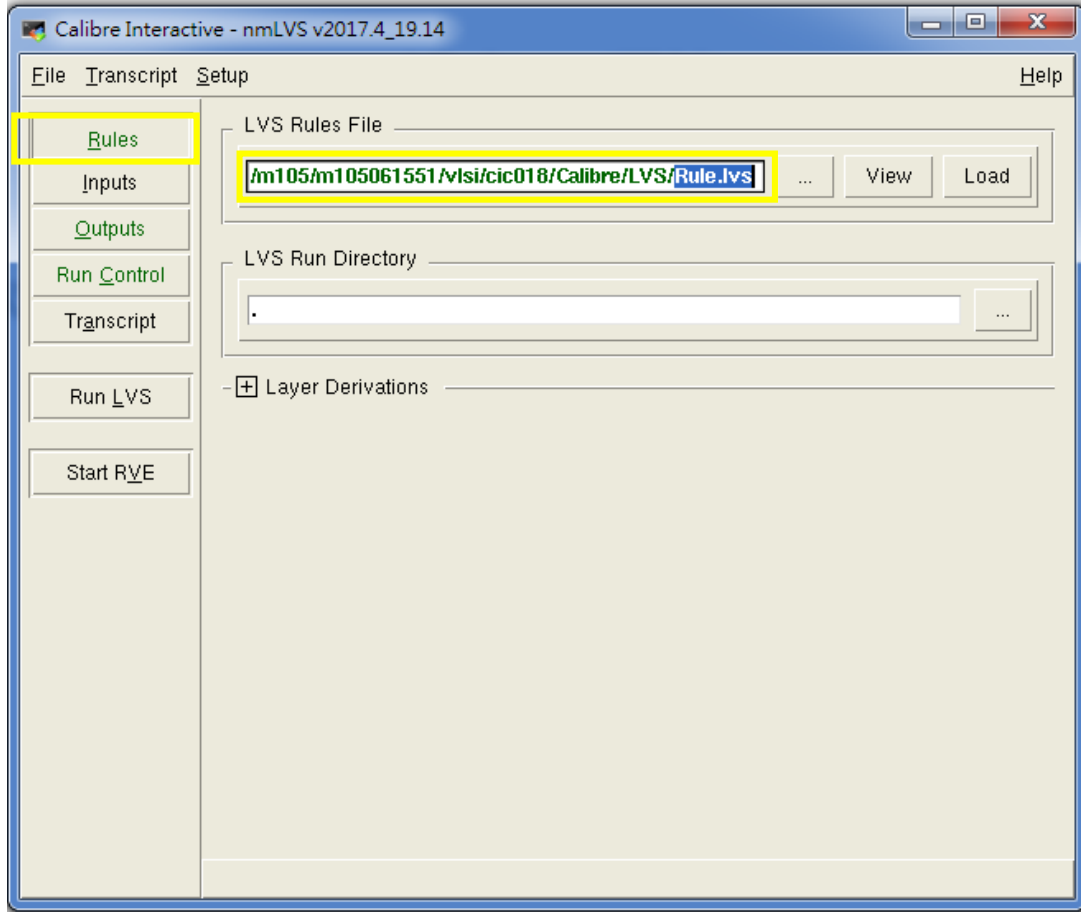
Calibre -gui -lvs &



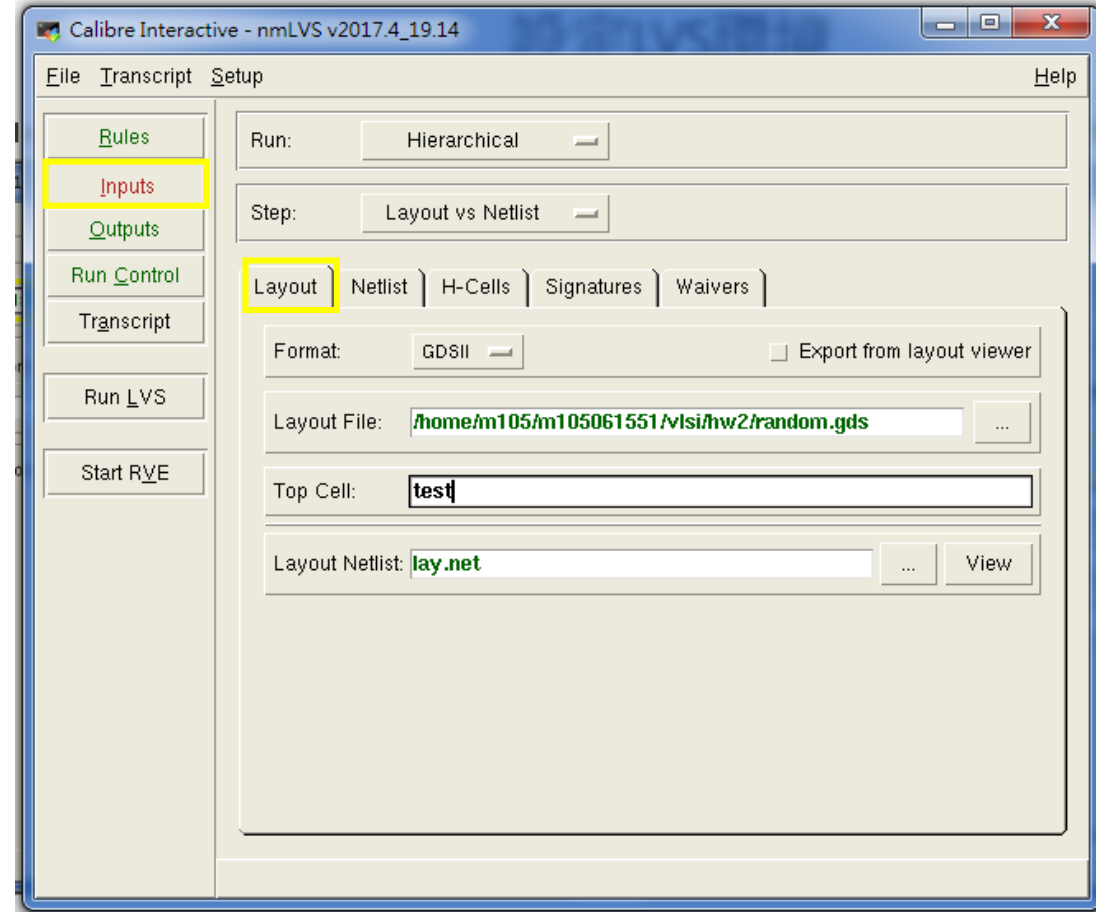
關掉這個

設定LVS環境

在Rules標籤下，LVS Rules File選擇: Rule.lvs

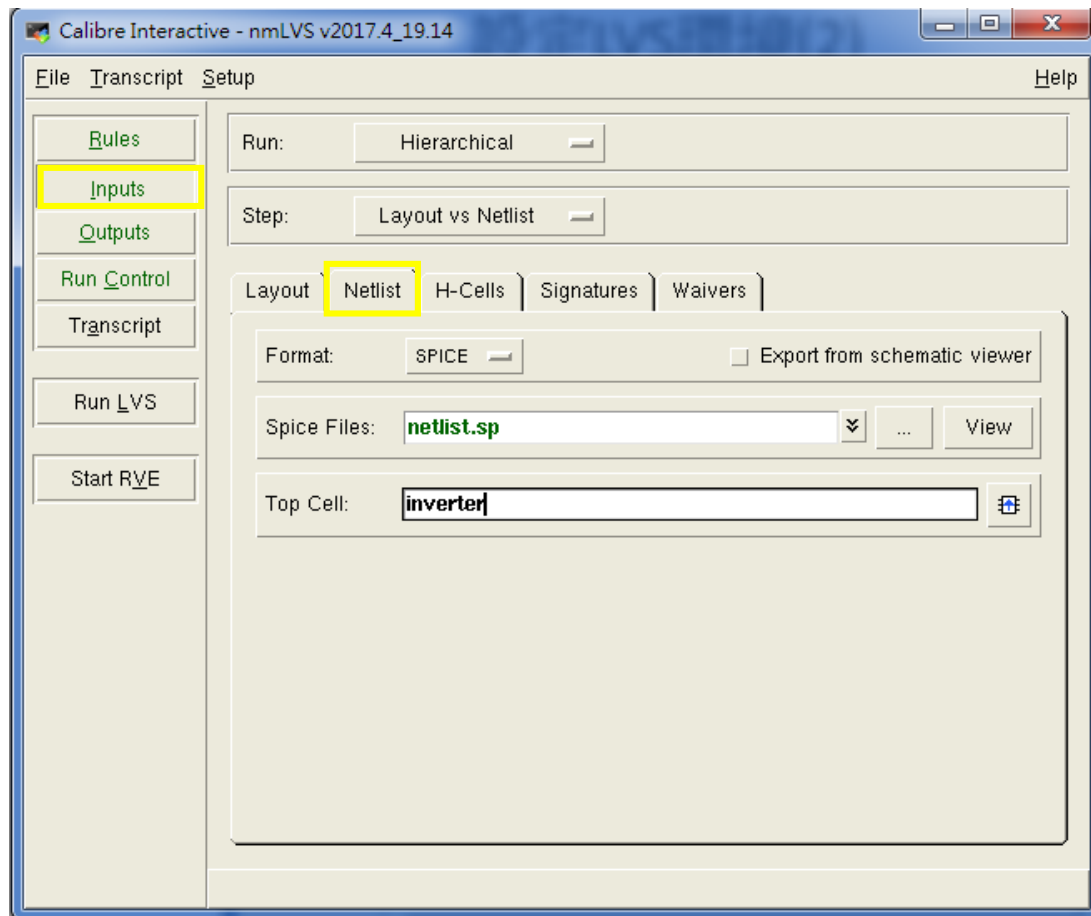


在Inputs/Layout標籤下，Layout File選擇剛才轉出的gds檔，Top Cell 為top cell name(test)



設定LVS環境(2)

在Inputs/Netlist標籤下，Spice File選擇subcircuit形式的電路檔，Top Cell 為top cell(subcircuit) name(inverter)



然後就可以run了

LVS Result

請做到LVS Clean(要看到打勾+笑臉)

