題目：ARM and HPS

1. 實驗結果

```
root@socfpga:~# mount -t vfat /dev/sda1 dir
dir/           dir_for_mount/
root@socfpga:~# mount -t vfat /dev/sda1 dir_for_mount
FAT-fs (sda1): Volume was not properly unmounted. Some data may be corrupt. Plea
se run fsck.
root@socfpga:~# cp -p /dir_for_mount/my_first_hps/home/root
BusyBox v1.20.2 (2013-09-27 23:27:54 CDT) multi-call binary.

Usage: cp [OPTIONS] SOURCE... DEST

root@socfpga:~# cd dir
root@socfpga:~/dir# cd dir_for_mount/my_first_hps
-sh: cd: dir_for_mount/my_first_hps: No such file or directory
root@socfpga:~/dir# cd dir_for_mount/
-sh: cd: dir_for_mount/: No such file or directory
root@socfpga:~/dir# cd ..
root@socfpga:~# cd dir_for_mount/my_first_hps
root@socfpga:~/dir_for_mount/my_first_hps# ./my_first_hps
Hello World!
```

```
root@socfpga:~# mount /dev/mmcblk0p1 di
FAT-fs (mmcblk0p1): Volume was not properly unmounted. Some data may be corrupt.
 Please run fsck.
root@socfpga:~# ./my_first_hps
-sh: ./my_first_hps: No such file or directory
root@socfpga:~# cd di/
root@socfpga:~/di# ./my_first_hps
-sh: ./my_first_hps: Is a directory
root@socfpga:~/di# cd di/my_first_hps
-sh: cd: di/my_first_hps: No such file or directory
root@socfpga:~/di# cd my_first_hps
root@socfpga:~/di/my_first_hps# ./my_first_hps
Hello World!
```

2. 問題與討論

- 網路線接口要亮綠色燈才代表成功連線。
- USB 如果出現問題，會出現 FAT 相關的錯誤訊息。
- 在 Linux 系統，一切皆是文件。mount 是將設備文件目錄和 Linux 文件目錄進行連動，如此一來，在 Linux 文件目錄操作就是對設備操作。連動時的 Linux 文件要是空的。
- 需要使用 Altera SOC EDS 將 C 程式編譯產生執行檔，放入 SD Card，經過 HPS 進到 FPGA。