111 大學部OS - HW1 demo 測資與參考答案

[**demo.txt下載連結**]

part 1

test simple command

test case: `cat demo.txt`

expected result:

```
Today is os' day.
I am a student in CSIE.
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
I am going to try my best.
Have a nice os' day.
```

test background execution

test case: `cat demo.txt &`

expected result: (pid 數字可能不同)

```
[Pid]: 123
Today is os' day.
I am a student in CSIE.
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
I am going to try my best.
Have a nice os' day.
```

test input re-direction

test case: `cat < demo.txt`

expected result:

```
Today is os' day.
I am a student in CSIE.
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
I am going to try my best.
Have a nice os' day.
```

test output re-direction

test case: `cat demo.txt > out1` 然後 `cat out1`

expected result:

```
Today is os' day.
I am a student in CSIE.
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
I am going to try my best.
Have a nice os' day.
```

test input/output re-direction

test case: `cat < demo.txt > out2` 然後 `$ cat out2`

expected result:

```
Today is os' day.
I am a student in CSIE.
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
I am going to try my best.
Have a nice os' day.
```

test pipe

test case: `cat demo.txt | tail -2`

expected result:

```
I am going to try my best.
Have a nice os' day.
```

test pipe again

test case: `cat demo.txt | grep os`

expected result:

```
Today is os' Day.
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
Have a nice os' day
```

test multi-pipe

test case: `cat demo.txt | tail -5 | head -3 | grep os`
expected result:

```
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
```

test multi-pipe + input/output re-direction

test case: `cat < demo.txt | tail -5 | head -3 | grep os > out3` 然後 `cat out3`
expected result:

```
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
```

test multi-pipe + input/output re-direction + background execution

test case: `cat < demo.txt | tail -5 | head -3 | grep os > out4 &` 然後 `cat out4`
expected result:

```
[Pid]: 321 (應跟前面的 123 不同)
和
I love os, you love os, David loves os.
The hw-demo will take place in oslab.
```

part 2

test echo

`echo (隨便一串英文數字)` (顯示和餵給echo相同的英文數字)

`echo (隨便另一串英文數字)` (顯示和餵給echo相同的英文數字)

`echo -n 123` (顯示 123 且沒換行)

`echo -n -n -n` (沒換行，並顯示兩個 -n)

`echo 321` (顯示 321 且有換行)

`echo --version` (應該只會看到 --version)

test record and replay

`record` (record 要有最近打過的16個指令的正確紀錄，並且最新的(數字16)應要是 record)

`replay [number]` (挑一個你重現的指令, 看輸出對不對)

`replay [number] | head -1` (挑一個你重現的指令, 看輸出對不對)

`record` (看一下 record 顯示的數字有沒有對應更新)

`replay [number] | head -1 > out5` (挑一個你重現的指令)

`cat out5` (看內容對不對)

test mypid

`mypid -i mypid -p 前一道指令的輸出數字 mypid -c 前一道指令的輸出數字` (注意有沒有對應的pid, 即第一行 mypid -i 的輸出)

`mypid -c 1` (應該要顯示很多個 pid 數字)