

系統程式設計

Lab5 Stdio Compare

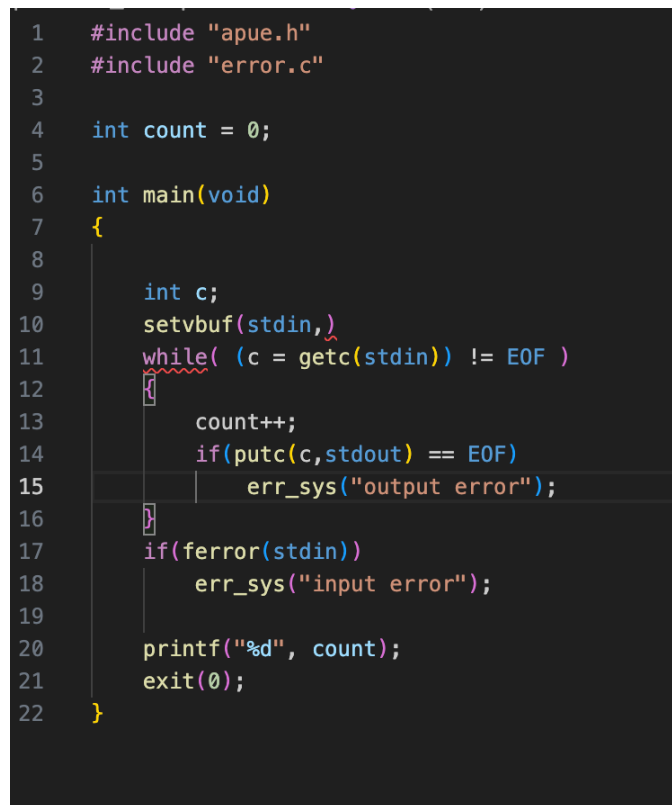
學號:411410005

姓名:莊翔鈞

1. Where is the counter you add?

(請註明在程式碼的第幾行，最好加上截圖)

Counter 在第 4 與 13 行



```
1  #include "apue.h"
2  #include "error.c"
3
4  int count = 0;
5
6  int main(void)
7  {
8
9      int c;
10     setvbuf(stdin, )
11     while( (c = getc(stdin)) != EOF )
12     {
13         count++;
14         if(putc(c, stdout) == EOF)
15             err_sys("output error");
16     }
17     if(ferror(stdin))
18         err_sys("input error");
19
20     printf("%d", count);
21     exit(0);
22 }
```

2. Screen shot for Table1

(提供每個執行後的截圖，並說明每張截圖是屬於哪種

function)

getc/putc

```
((base) 930727fre@930727frem2 test % /usr/bin/time ./a.out <100mb_file_for_buffSize4096
104857600      7.18 real      5.56 user      1.32 sys
((base) 930727fre@930727frem2 test %
```

fgets/fputs

```
((base) 930727fre@930727frem2 test % /usr/bin/time ./a.out <100mb_file_for_buffSize4096
25607
      0.06 real      0.01 user      0.03 sys
((base) 930727fre@930727frem2 test %
```

3. Screen shot for Table2

(提供每個執行後的截圖，並說明每張截圖是屬於哪種 mode)

Fully buffered

```
((base) 930727fre@930727frem2 test % /usr/bin/time ./a.out <100mb_file_for_buffSize4096
25607
      0.07 real      0.01 user      0.03 sys
```

Line buffering

```
((base) 930727fre@930727frem2 test % /usr/bin/time ./a.out <100mb_file_for_buffSize4096
25607
      0.06 real      0.01 user      0.03 sys
```

No buffering

```
((base) 930727fre@930727frem2 test % /usr/bin/time ./a.out <100mb_file_for_buffSize4096
25607
     58.02 real     19.16 user     38.80 sys
```