

CS446102 Software Engineering Homework 2 (Group)

(Notes) **Two or three students** should work as a team and please follow the format to upload the homework.

(註) 若為 8 人的組別，請以 **2、2、2、2 人** 為一組作答 (四支程式)，若 7 人的組別則以 **2、2、3 人** 為一組作答 (schedule.c 以外的三支程式)。**檔案統一由組長上傳**，檔案格式請參照最後的說明。

In this homework, every group needs to deal with the four programs: print_tokens.c, print_tokens2.c, replace.c, and schedule.c.

Although the programs work well, they were seeded some faults. These faults lead to malfunction, some logic problems or even redundant contents. Please form an inspection team to repair the codes and make an inspection report for the programs. What you need to hand in includes:

- Fixed programs (40%)
- A complete inspection report (Please refer to the Appendix - *Formal Technical Review Forms*. If there are any questions, reading *Review-Forms-Help* will help you get more information) (60%)

Input 1: (to print_tokens.c)

```
lambda [ 1 ;#y#x3
if t#Y#w7 ' $#charza ;$#charvzgG9
xor "" ' ;$#charHo0
```

Output 1:

```
keyword, "lambda".
lsquare.
numeric, 1.
keyword, "if".
identifier, "t".
character, "Y".
character, "w".
numeric, 7.
quote.
error, "$".
character, "c".
identifier, "harza".
keyword, "xor".
```

```
string, "".
```

```
quote.
```

```
eof.
```

Input 2: (to print_tokens2.c)

```
vf+# g{On1TL600u"ybEg8"
```

```
=> w5]
```

```
"M{Qv|H1pLYv2Eb1x5)-
```

```
N#=r/&":tr&,0q&m=~3D'lR^J"
```

```
lambda "S"
```

```
xor
```

```
#N83 if #x
```

```
X6
```

```
or
```

```
if
```

```
#
```

```
J14f43s11
```

```
lambda
```

```
xor
```

```
#j"k%[rlzeb^FWp`Kx+b)Z.%YYoWGP5(#tyA\lgF"ri_)!7cZSfI\|;\fb:n~
```

```
+dKATrMDAsP-_f652mF9s Vd^EF")qaLVRhCJPM@E
```

```
'"T"]
```

```
)X
```

Output 2:

```
error,"vf+# g{On1TL600u"ybEg8"".
```

```
keyword,"=>".
```

```
identifier,"w5".
```

```
rsquare.
```

```
string,"M{Qv|H1pLYv2Eb1x5)-N#=r/&".
```

```
error,":tr&".
```

```
comma.
```

```
error,"0q&m=~3D".
```

```
quote.
```

```
error,"lR^J"".
```

```
keyword,"lambda".
```

```
string,"S".
```

```
keyword,"xor".
```

```
character,"N83".
```

```
keyword,"if".
```

```
character,"x".
identifier,"X6".
keyword,"or".
keyword,"if".
error,"#".
identifier,"Jl4f43s11".
keyword,"lambda".
keyword,"xor".
character,"j"k%".
lsquare.
error,"rlzeb^FWp".
bquote.
error,"Kx+b".
rparen.
error,"Z.%YYoWGP5".
lparen.
character,"tyA\".
rsquare.
error,"gF"ri_".
rparen.
error,"!7cZSfI\\|".
quote.
string,"T".
rsquare.
rparen.
identifier,"X".
```

Input 3: (to replace.c) Parameter: x y

```
xmas
xerox
tax
relax
XXYY
```

Output 3:

```
ymas
yeroy
tay
XXYY
```

Input 4: (to schedule.c) a.out n3 n2 n1

```
-----
1 1
7
-----
1 2
1 3
1 1
3
1 3
4 0
7
-----
1 3
1 2
1 1
1 1
1 1
2 1 0.5
2 2 0.5
7
-----
1 1
6
-----
Output 4:
-----
0 1 2 3 4 5 6
-----
10 8 7 9
-----
11 14 12 13 15
-----
16
-----
```

Figure 1 Sample input and output of two programs

Format

Each small group need to hand in a fixed program and a report and put them in a folder. Please pack these three folders into a zip file. The format is as below:

<SE_HW3_Group_number>.zip

- <student_ID>_<student_ID>_<student_ID> or <student_ID>_<student_ID>
 - Fixed_<file_name>.c
 - <file_name>_ Inspection _Report.pdf

For example,

SE_HW3_Group_13.zip

- 104062615_104065533
 - Fixed_replace.c
 - replace_ Inspection _Report.pdf

Notice

COPY will get zero!!

Deadline: May, 14, 23:59

The following situation will surely lead to the deduction of your score:

- Not following the format
- Wrong-spelling in the report
- Delay:
 - 1 day : *0.9
 - 2 days: *0.8
 - More than 2 days: **0**

If you have any questions, please feel free to contact TAs ☺