

# Homework #1: Substitute

Due Date: 2017/03/02 Thr.

## Instruction

Please turnin the program to PD.hw1; if overdue, turnin the program to PD.hw1.delay.  
請將作業 turnin 至 PD.hw1 ; 遲交請 turnin 至 PD.hw1.delay。

Please finish demo before 2017/03/16 Thr. (two weeks after the due date).  
請於 2017/03/16 Thr. (due date 後兩週) 前完成 demo。

Please contact [pdta@gais.cs.ccu.edu.tw](mailto:pdta@gais.cs.ccu.edu.tw) if any problem shall be encountered.  
若有任何問題, 請來信 [pdta@gais.cs.ccu.edu.tw](mailto:pdta@gais.cs.ccu.edu.tw).  
Identifying yourself and having proper signature are essential for TAs to reply.  
請務必於信中表明身份, 並於信末署名, 以利助教群可以即時回覆。

## Environment

CSIE workstations 系上工作站

## Description

Compose a program performs pattern substitution.  
Each line in testfile contains no more than 1000 characters.  
撰寫程式進行關鍵字取代。測資中每行至多 1000 字元。

Read from stdin with function `fgets()` until EOF occurred, write to stdout.  
自 stdin 以函式 `fgets()` 讀取測資至 EOF 止, 寫出至 stdout。

## Requirement

```
substitute [-i] [-a] source_pat target_pat
```

### Options

1. -i: case insensitive 不分大小寫
2. -a: subsitute all matched patterns 取代所有符合的關鍵字

## Grading Policy

1. Basic function: 70%
2. Option -i: 15%
3. Option -a: 15%

## Sample

test.txt

```
apple is sweet, apple is red. I like Apple.
```

input 0

```
cat test.txt | ./substitute apple banana
```

output 0

```
banana is sweet, apple is red. I like Apple.
```

input 1

```
cat test.txt | ./substitute -a apple banana
```

output 1

```
banana is sweet, banana is red, I like Apple.
```

input 2

```
cat test.txt | ./substitute -a -i apple banana
```

output 2

```
banana is sweet, banana is red, I like banana.
```