

CS 235101
Data Structures
資料結構

Introduction
to
NTHU Online Judge System

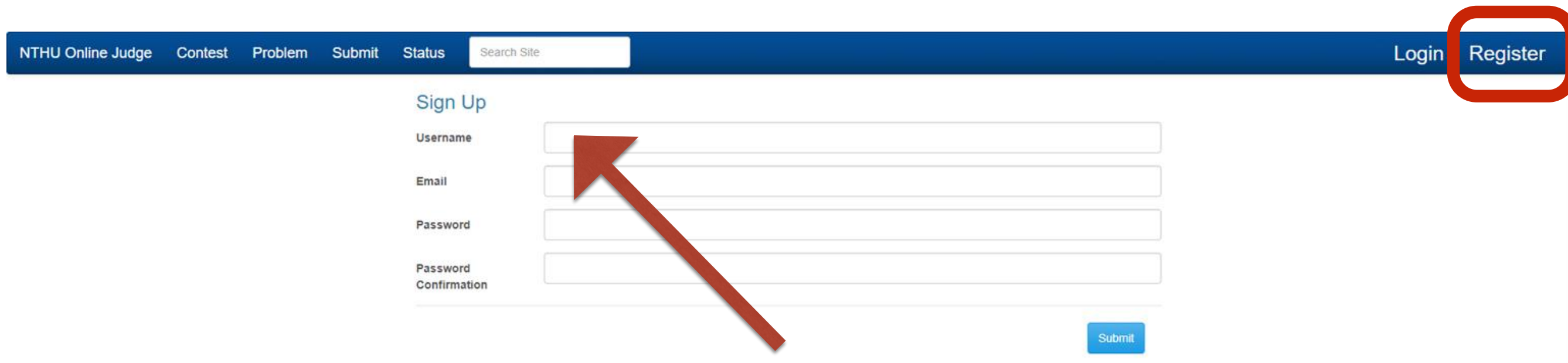
Announcement

Quiz practice

- 9/20(三) Wednesday 6:30~
- 不計分,但算點名
- EE building 每個人有分配教室
CS :323(MAC),326,328
EE: 407

Register

<https://acm.cs.nthu.edu.tw/>



NTHU Online Judge Contest Problem Submit Status Search Site Login Register

Sign Up

Username

Email

Password

Password Confirmation

Submit

Username : DSK+StudentID
Ex. DSK106062521

**Username一定要按照這個格式
否則無法計分**

Wait the account confirmation email to activate your account

Register

問題:

1. 帳號被註冊過了

->登記你已註冊過的帳號

Username : DSK+StudentID

Ex. DSK106062521

2. 收不到驗證信

->可以按忘記密碼,重設密碼那封信
應該會收到,直接修改密碼就可以當
驗證成功

Login

NTHU Online Judge

Contest

Problem

Submit

Status

Search Site

Login Register

Login

Username

Password

Submit

Contest

NTHU Online Judge

Contest

Problem


Submit

Status

Login

Register

Contest Archive




1259

[CS I2P \(II\) 2017-2 Lee Quiz1](#)

2017/09/15 13:52:00

2017/09/15 15:20:00

judgeSCOPE




1257

[I2P \(I\) 2017_Yang_hw1](#)

2017/09/14 18:30:00

2017/09/24 12:00:00

judgewmnet




1253

[Lee Summer Exercises](#)

2017/09/11 12:00:00

2017/09/15 12:00:00

judgeSCOPE



1252

[\[免修測試考試\] 程式設計導論](#)

2017/09/04 08:40:00

2017/09/04 10:40:00

judgevllab

Problems

1145 - DS OJ_Practice

Time

2017/03/08 20:30:00

Contest Not Started Yet

2017/03/08 23:59:00

Clarification

Problem

Asker

Description

Reply

Replier

Reply Time

For all team

Clarify

Overview

Problem ▾

#

Problem

Pass Rate (passed user / total user)

11342

test1

11346

test2

Problem

11342 - test1

[Status](#) | [Limits](#) [Submit](#)

Description

Please calculate the number of words in each line of the input article

Input

Input an article

Output

Output the number of words in each line.

Sample Input

[Download](#)

```
Computer
science is
the scientific and
practical approach to computation
and its applications
```

Sample Output

[Download](#)

```
1
2
3
4
3
```


Submit

Submit Code 11342 - test1

Problem ID

11342

Language

C++: -O2 -lm -std=c++

Backend:

gcc:

g++:

Code

1 Code goes here...

We support Sublime key bindings!

Browse

Submit

Status

Status

Username


your account


Problem ID

Contest ID

Status

SEARCH

SID	Submit Time	Username	Problem	Status	Source
1478716 	March 1, 2017, 8:16 p.m.	your account	11342 - test1	Being Judged	C++

SID	Submit Time	Username	Problem	Status	Source
1478691 	March 1, 2017, 7:15 p.m.	your account	11342 - test1	All Accepted (4/4)	C++

Status

- **Verdict information**

All accepted(4/4)

Not Accepted(0/4), (1/4), (2/4), (3/4)

Compile
Error

Wrong
Answer

Time Limit
Exceeded

Presentation
Error

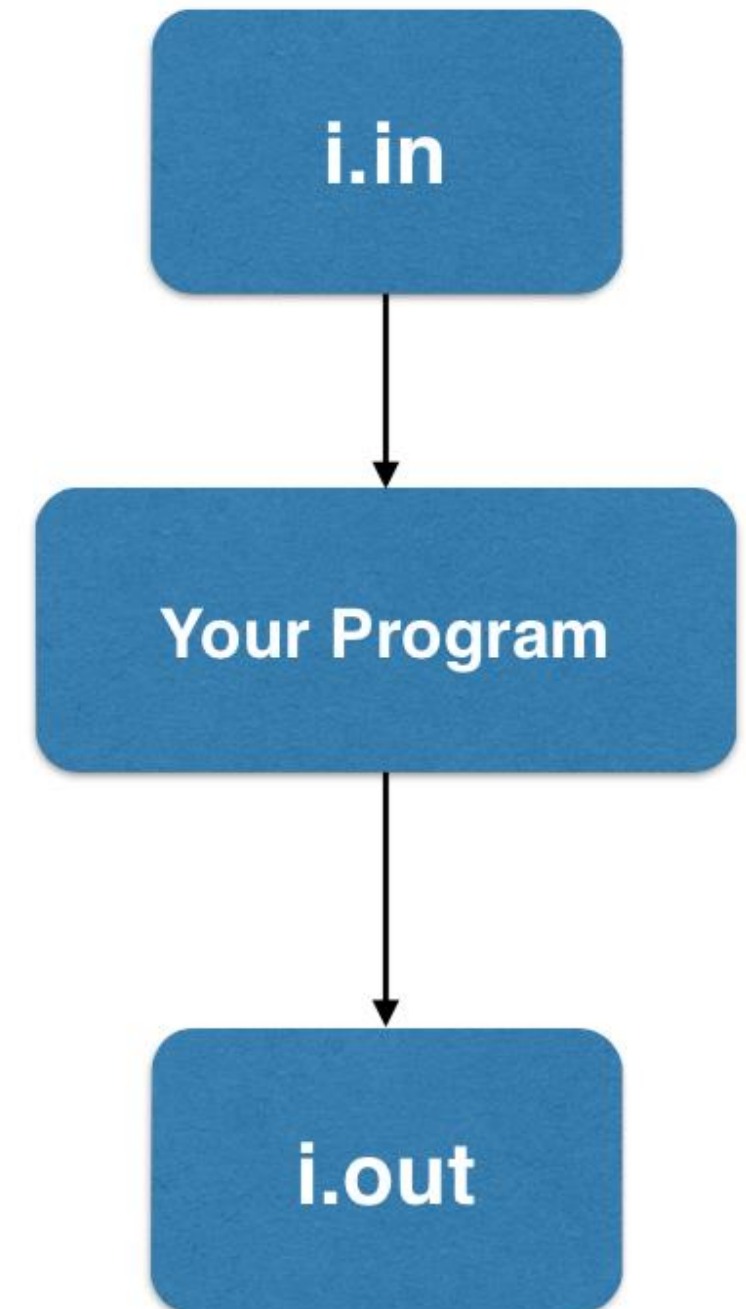
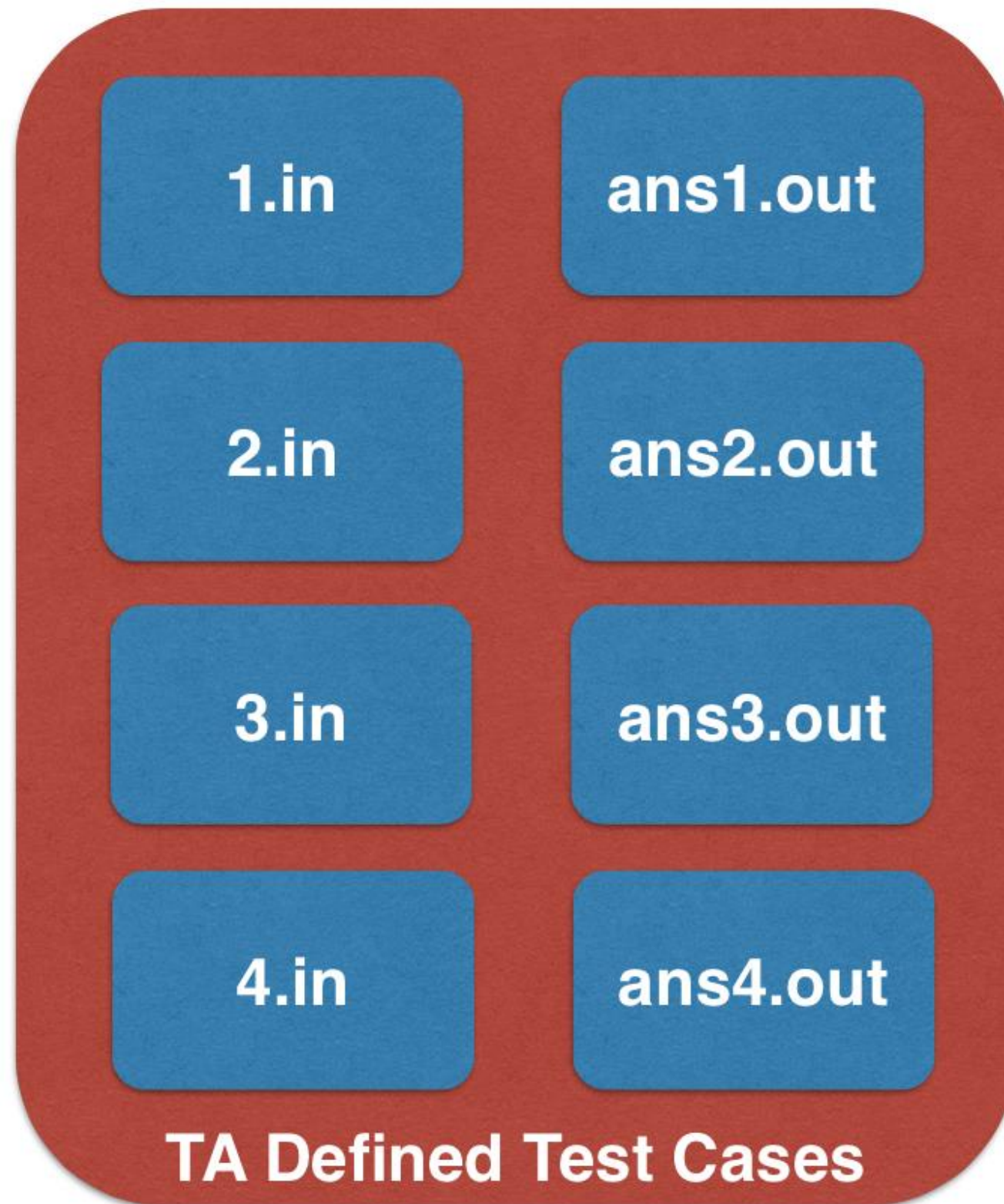
Not Accepted (0/4)	C++
Not Accepted	
Not Accepted	
All Accepted	
All Accepted	
Compile Error	
Compile Error	
Not Accepted (0/4)	C++
Compile Error	C++

1. Wrong Answer CPU: 3 ms
2. Wrong Answer CPU: 2 ms
3. Wrong Answer CPU: 3 ms
4. Wrong Answer CPU: 3 ms

C++ IO for online judge

Online Judge

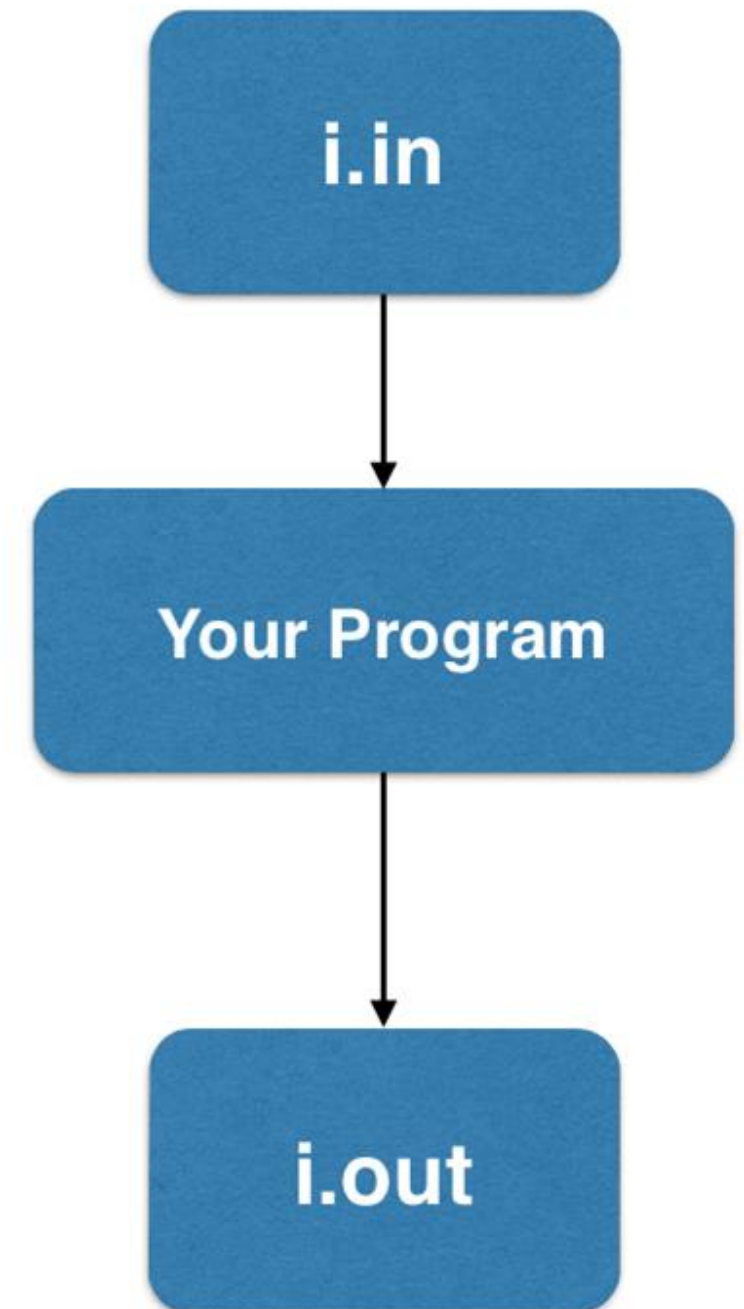
For $i=1\sim 4$



Online Judge

For $i=1 \sim 4$

- Online Judge will do the following
- For each predefined case i
 - `./a.out <i.in >i.out`
 - **compare `i.out` & `ansi.out`**



Code for Submission

```
#include <iostream>

....
int main(void)
{
    //read until EOF
    while( std::cin >> ... )
    {
        //processing & output ...
    }
    return 0;
}
```

Code for Debugging I

```
#include <iostream>
#include <cstdio>

....
int main(void)
{
    //redirect stdin to 1.in file
    freopen("1.in", "r", stdin);

    //read until EOF
    while( std::cin >> ... )
    {
        //processing & output ...
    }
    return 0;
}
```


Code for Debugging II

```
#include <iostream>

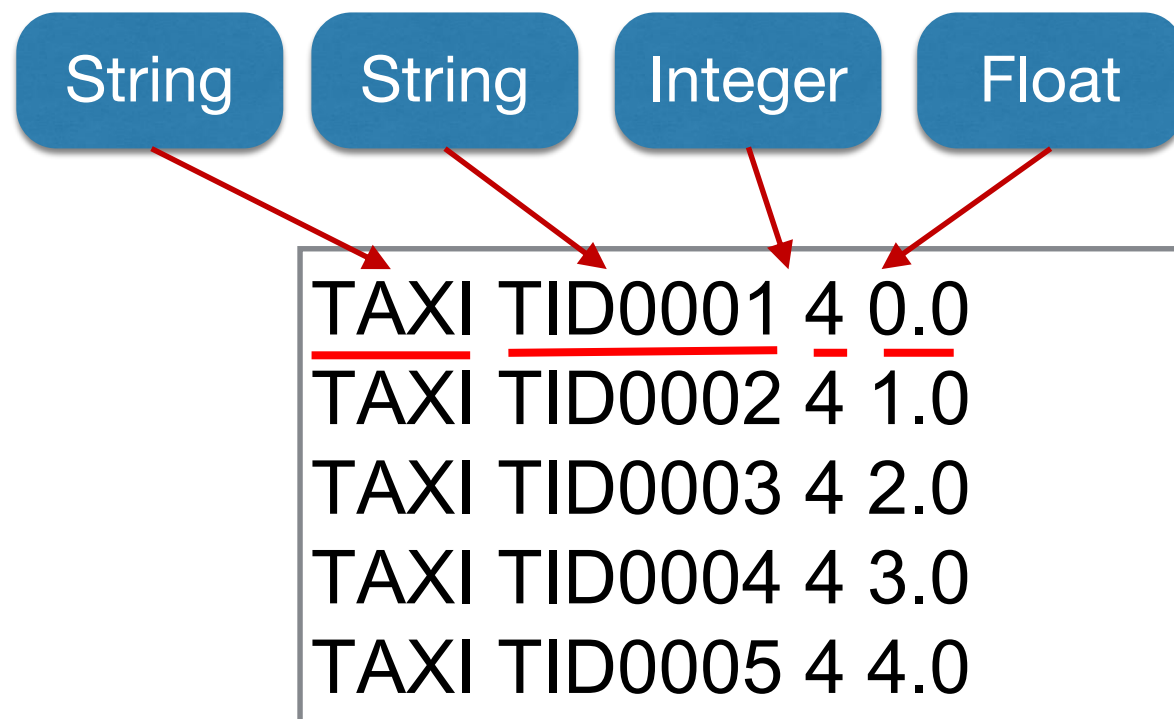
....
int main(void)
{
    //read until EOF
    while( std::cin >> ... )
    {
        //processing & output ...
    }
    return 0;
}
```

IO Redirection

\$ out.exe <1.in

IO - Example I

Fixed format of contents in each line



IO - Example I

```
#include <iostream>
```

```
....
```

```
int main(void)
```

```
{
```

```
    std::string cmd1, tid;
```

```
    int cap;
```

```
    float fValue;
```

```
    //read until EOF
```

```
    while( std::cin >> cmd1 >> tid >> cap >> fValue )
```

```
    {
```

```
        //processing & output ...
```

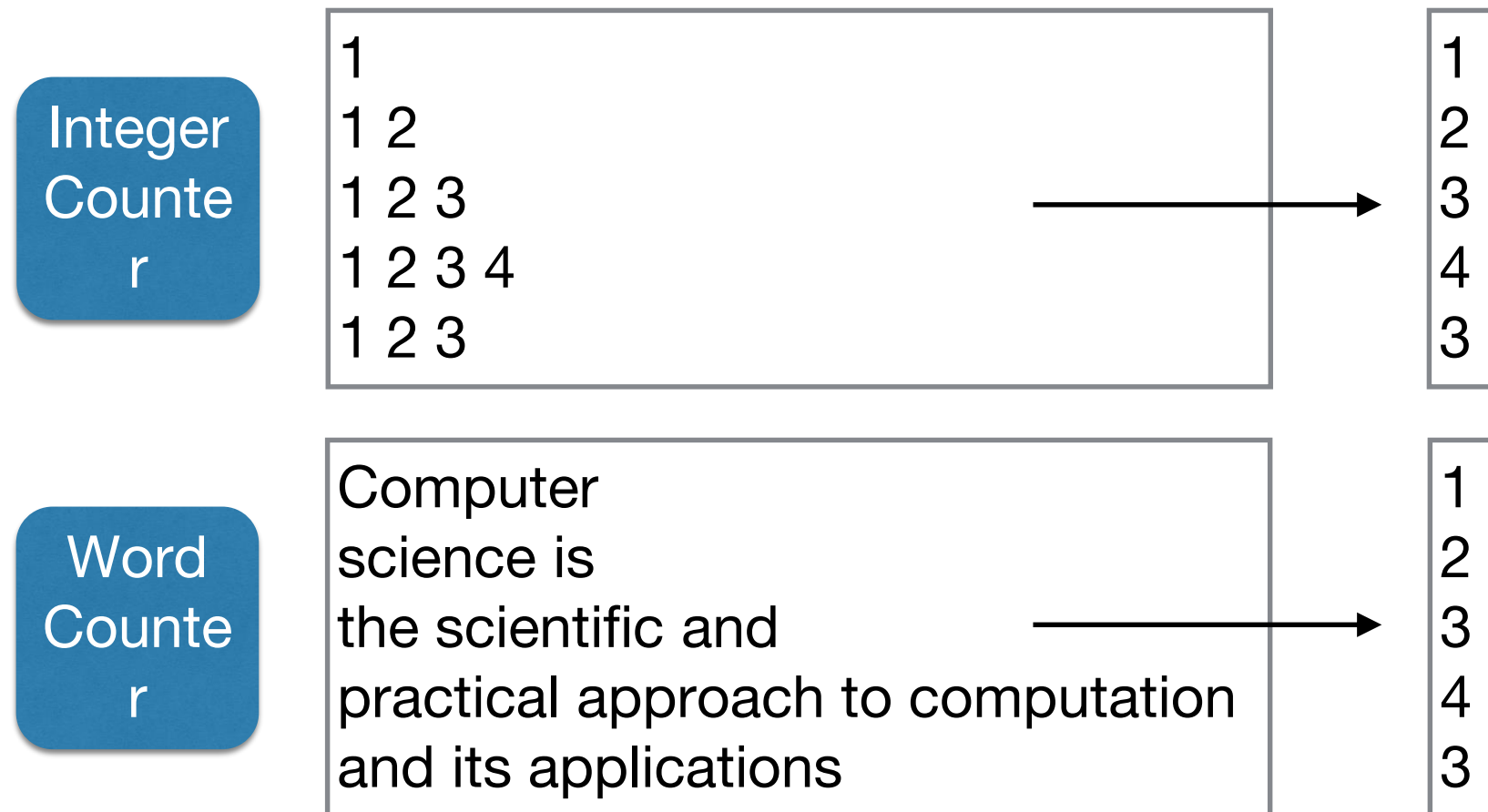
```
    }
```

```
    return 0;
```

```
}
```

IO - Example II

Dynamic number of data in each line



IO - Example II

```
#include <iostream>
#include <string>
#include <sstream>

...
int main(void)
{
    //read a line until EOF
    std::string lineStr;
    while( std::getline(std::cin,lineStr) )
    {
        //make a input string stream
        std::istringstream iss(lineStr);

        //read from the iss until end of string
        int iValue;
        while( iss >> iValue )
            //count
    }
    return 0;
}
```

Integer
Counter

1
1 2
1 2 3
1 2 3 4
1 2 3



1
2
3
4
3

IO - Example II

```
#include <iostream>
#include <string>
#include <sstream>

...
int main(void)
{
    //read a line until EOF
    std::string lineStr;
    while( std::getline(std::cin,lineStr) )
    {
        //make a input string stream
        std::istringstream iss(lineStr);

        //read from the iss until end of string
        std::string str;
        while( iss >> str )
            //count
    }
    return 0;
}
```

Word
Counte
r

Computer
science is
the scientific and
practical approach to computation
and its applications

1
2
3
4
3

Practice

- 11544 - DS OJ_Practice_test1
- 11546 - DS OJ_Practice_test2