



# miniRE Dash

*Summary: THIS document is the subject for the miniRE Dash @42seoul.eduthon*

*version: 1.0*

# Contents

<b>I</b>	<b><u>Instruction</u></b>	<b>2</b>
<b>II</b>	<b><u>Foreword</u></b>	<b>3</b>
<b>III</b>	<b><u>Exercise 00 : Eleven number checker</u></b>	<b>5</b>
<b>IV</b>	<b><u>Exercise 01 : Phone number checker</u></b>	<b>6</b>
<b>V</b>	<b><u>Exercise 02 : Simple E-mail validator</u></b>	<b>8</b>
<b>VI</b>	<b><u>Exercise 03 : Bonus : Push swap instruction validator</u></b>	<b>10</b>
<b>VII</b>	<b><u>Exercise 04 : Bonus : Snake to Camel</u></b>	<b>11</b>

# Chapter I

## Instructions


- In this subject, you will practice finding the **pattern** you want using *regular expressions*.
- The **pattern** should not be too long. Make your pattern efficiently. If you submit a pattern that is too long and complicate, the test will **KO** even if your answer is correct.
- The turn in file must be a single, compilable file.

# **Chapter II**

## **Foreword**

# Chapter III

## Exercice 00 : Eleven number checker

	Exercise 00
eleven_number_checker	
Turn-in directory : <i>ex00/</i>	
File to turn in : eleven_number_checker.c	
Allowed functions : write	

- Create a program that check input string is *phone number*.
- *phone number* does not contain country code, hyphen or anything, except number. JUST plane 11 digit of number.
- Here's how it should be prototyped :


```
void    eleven_number_checker(char *input);
```

Example :

```
$>./eleven_number_checker 01012345678
OK$
$>./eleven_number_checker 0101234o678
KO$
```

# Chapter IV

## Exercise 01 : Phone number checker

	Exercise 01
phone_number_checker	
Turn-in directory : <i>ex01/</i>	
File to turn in : phone_number_checker.c	
Allowed functions : regcomp, regexexec, regerror, regfree, write	

- Rewrite a program that check input number is ***valid phone number***.
- Use <regex.h> header's function. We provide example code with basic usage of Regex functions.
- In Regex manner, ***valid phone number*** starts with three-digit of 01[0-9], followed by two four-digit numbers, hyphen in between.
- Here's how it should be prototyped :

```
void    phone_number_checker(char *input);
```


Examples in next page

Example :

```
$> ./example
Error
$> ./example arg1 arg2
Error
$> ./example "010-4242-a242"
K0
$> ./example "010-4242-4010-4242-4242"
K0
$> ./example "010-4242-4242"
010-4242-4242
$> ./example "010-424-4242"
010-424-4242
$> ./example "010-4242-4242010-2424-2424"
010-4242-4242
010-2424-2424
$> ./example " 010-4242-4242    010-4242-4242"
010-4242-4242
010-4242-4242
```

# Chapter V

## Exercise 02 : Simple E-mail validator

	Exercise 02
email_validator	
Turn-in directory : ex02/	
File to turn in : simple_email_validator.c	
Allowed functions : regcomp, regex, regerror, regfree, write	

- Write a program to check an input is **valid E-mail**
- **Valid E-mail** is divided into two parts. Before the '@' character is the **ID** part. After the '@' is **Domain** part
- **ID** contains uppercase and lowercase letters and numbers, except 4, 2, s, e, o, u, or l.
- **Domain** contains uppercase and lowercase letters and numbers, but only lowercase letters after '.' (dot sign).
- Here's how it should be prototyped :

```
void    simple_email_validator(char *input);
```

Examples in next page



$$(A^c)^c = A$$



Example :


```
$> ./example
Error
$> ./example arg1 arg2
Error
$> ./example "benene31@42seoul.kr"
KO
$> ./example "banana42@42seoul.kr"
KO
$> ./example "@42seoul.kr"
KO
$> ./example "banana@42seoul.Kr"
KO
$> ./example " banana31@42seoul.kr "
banana31@42seoul.kr
```

# Bonus

## Chapter VI

### Exercise 03 :

### Push swap instruction validator

	Exercise 02
ps_instruction_validator	
Turn-in directory : <i>ex02/</i>	
File to turn in : <i>pushswap_instruction_validator.c</i>	
Allowed functions : <i>regcomp, regex, regerror, regfree, write</i>	

- Push\_swap has 11 operations, “pa, pb, sa, sb, ss, ra, rb, rr, rra, rrb, rrr”.
- Write a program to check instructions are valid. We will test your code with random operations, some of them are invalid form.
- Instructions must be separated by a ‘\n’ and nothing else.
- Here’s how it should be prototyped :


```
void    pushswap_instruction_validator(char *input);
```



**This is pipe and, yes. This is a hint.**

# Chapter VII

## Exercise 04 : Snake to Camel

	Exercise 03
sanke_toCamel	
Turn-in directory : <i>ex03/</i>	
File to turn in : sanke_ToCamel.c	
Allowed functions : regcomp, regex, regerror, regfree	

- Write a program to substitute a valid *snake case* input to *camel case*.
- *Camel case* always starts with uppercase letter.
- Here's how it should be prototyped :

```
void    snake_ToCamel(char *input);
```



I think everyone knows what a snake case and a camel case are, but in case anyone doesn't, I prepared this.