

# 0x06. Regular expression

RegexDevOps

- By: Sylvain Kalache
- Weight: 1
- Project over - took place from Jul 26, 2022 6:00 AM to Jul 27, 2022 6:00 AM
- An auto review will be launched at the deadline

## *In a nutshell...*

- **Auto QA review:** 24.0/24 mandatory & 9.0/9 optional
- **Altogether: 200.0%**
  - Mandatory: 100.0%
  - Optional: 100.0%
  - Calculation:  $100.0\% + (100.0\% * 100.0\%) == 200.0\%$

## Concepts

*For this project, we expect you to look at this concept:*

- **Regular Expression**

## Background Context

For this project, you have to build your regular expression using Oniguruma, a regular expression library that which is used by Ruby by default. Note that other regular expression libraries sometimes have different properties.

Because the focus of this exercise is to play with regular expressions (regex), here is the Ruby code that you should use, just replace the regexp part, meaning the code in between the `//`:

```
sylvain@ubuntu$ cat example.rb
#!/usr/bin/env ruby
puts ARGV[0].scan(/127.0.0.[0-9]/).join
sylvain@ubuntu$
sylvain@ubuntu$ ./example.rb 127.0.0.2
127.0.0.2
sylvain@ubuntu$ ./example.rb 127.0.0.1
127.0.0.1
sylvain@ubuntu$ ./example.rb 127.0.0.a
```

# Resources

## Read or watch:

- [Regular expressions - basics](#)
- [Regular expressions - advanced](#)
- [Rubular is your best friend](#)
- [Use a regular expression against a problem: now you have 2 problems](#)
- [Learn Regular Expressions with simple, interactive exercises](#)

# Requirements

## General

- Allowed editors: `vi`, `vim`, `emacs`
- All your files will be interpreted on Ubuntu 20.04 LTS
- All your files should end with a new line
- A `README.md` file, at the root of the folder of the project, is mandatory
- All your Bash script files must be executable
- The first line of all your Bash scripts should be exactly `#!/usr/bin/env ruby`
- All your regex must be built for the Oniguruma library

## Quiz questions

Great! You've completed the quiz successfully! Keep going! ([Show quiz](#))

# Tasks

## 0. Simply matching School

mandatory

Score: 100.0% (Checks completed: 100.0%)

## Requirements:

- The regular expression must match `School`
- Using the project instructions, create a Ruby script that accepts one argument and pass it to a regular expression matching method

## Example:

```
sylvain@ubuntu$ ./0-simply_match_school.rb School | cat -e
```

```
School$
sylvain@ubuntu$ ./0-simply_match_school.rb "Best School" | cat -e
School$
sylvain@ubuntu$ ./0-simply_match_school.rb "School Best School" | cat -e
SchoolSchool$
sylvain@ubuntu$ ./0-simply_match_school.rb "Grace Hopper" | cat -e
$
```

### Repo:

- GitHub repository: [alx-system\\_engineering-devops](#)
- Directory: [0x06-regular\\_expressions](#)
- File: [0-simply\\_match\\_school.rb](#)

Done! Help Check your code Get a sandbox QA Review

#### 1. Repetition Token #0

mandatory

Score: 100.0% (Checks completed: 100.0%)

### Requirements:

- Find the regular expression that will match the above cases
- Using the project instructions, create a Ruby script that accepts one argument and pass it to a regular expression matching method

### Repo:

- GitHub repository: [alx-system\\_engineering-devops](#)
- Directory: [0x06-regular\\_expressions](#)
- File: [1-repetition\\_token\\_0.rb](#)

Done! Help Check your code Get a sandbox QA Review

#### 2. Repetition Token #1

mandatory

Score: 100.0% (Checks completed: 100.0%)

### Requirements:

- Find the regular expression that will match the above cases

- Using the project instructions, create a Ruby script that accepts one argument and pass it to a regular expression matching method

### Repo:

- GitHub repository: `alx-system_engineering-devops`
- Directory: `0x06-regular_expressions`
- File: `2-repetition_token_1.rb`

Done! Help Check your code Get a sandbox QA Review

### 3. Repetition Token #2

mandatory

Score: 100.0% (Checks completed: 100.0%)

### Requirements:

- Find the regular expression that will match the above cases
- Using the project instructions, create a Ruby script that accepts one argument and pass it to a regular expression matching method

### Repo:

- GitHub repository: `alx-system_engineering-devops`
- Directory: `0x06-regular_expressions`
- File: `3-repetition_token_2.rb`

Done! Help Check your code Get a sandbox QA Review

### 4. Repetition Token #3

mandatory

Score: 100.0% (Checks completed: 100.0%)

### Requirements:

- Find the regular expression that will match the above cases
- Using the project instructions, create a Ruby script that accepts one argument and pass it to a regular expression matching method
- Your regex should not contain square brackets

### Repo:

- GitHub repository: `alx-system_engineering-devops`
- Directory: `0x06-regular_expressions`

- File: `4-repetition_token_3.rb`

Done! Help Check your code Get a sandbox QA Review

## 5. Not quite HBTN yet

mandatory

Score: 100.0% (Checks completed: 100.0%)

Requirements:

- The regular expression must be exactly matching a string that starts with `h` ends with `n` and can have any single character in between
- Using the project instructions, create a Ruby script that accepts one argument and pass it to a regular expression matching method

Example:

```
sylvain@ubuntu$ ./5-beginning_and_end.rb 'hn' | cat -e
$
sylvain@ubuntu$ ./5-beginning_and_end.rb 'hbn' | cat -e
hbn$
sylvain@ubuntu$ ./5-beginning_and_end.rb 'hbtn' | cat -e
$
sylvain@ubuntu$ ./5-beginning_and_end.rb 'h8n' | cat -e
h8n$
sylvain@ubuntu$
$
```

**Repo:**

- GitHub repository: `alx-system_engineering-devops`
- Directory: `0x06-regular_expressions`
- File: `5-beginning_and_end.rb`

Done! Help Check your code Get a sandbox QA Review

## 6. Call me maybe

mandatory

Score: 100.0% (Checks completed: 100.0%)

This task is brought to you by a professional advisor **Neha Jain**, Senior Software Engineer at LinkedIn.

Requirement:

- The regular expression must match a 10 digit phone number

Example:

```
sylvain@ubuntu$ ./6-phone_number.rb 4155049898 | cat -e
4155049898$
sylvain@ubuntu$ ./6-phone_number.rb " 4155049898" | cat -e
$
sylvain@ubuntu$ ./6-phone_number.rb "415 504 9898" | cat -e
$
sylvain@ubuntu$ ./6-phone_number.rb "415-504-9898" | cat -e
$
sylvain@ubuntu$
```

### Repo:

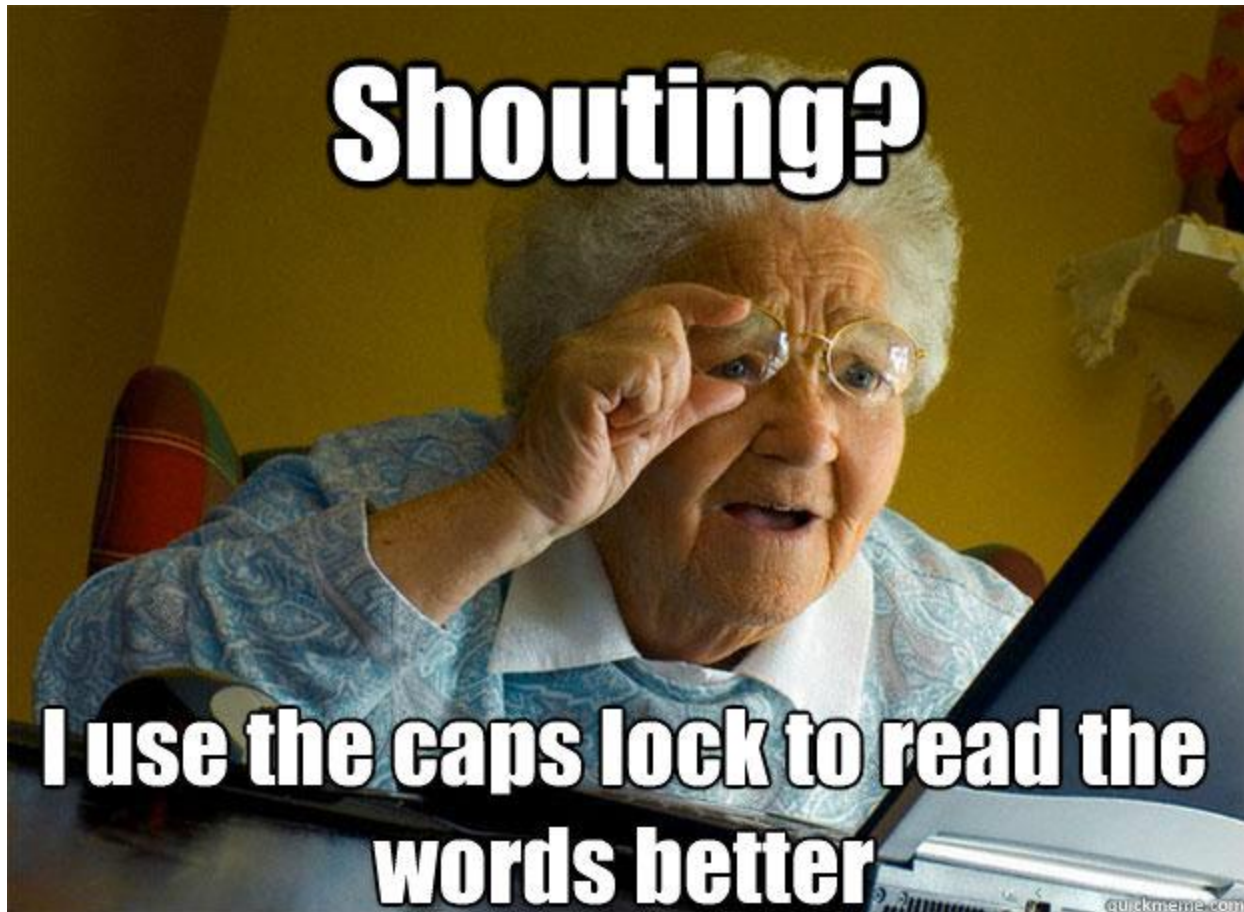
- GitHub repository: [alx-system\\_engineering-devops](#)
- Directory: [0x06-regular\\_expressions](#)
- File: [6-phone\\_number.rb](#)

Done! Help Check your code Get a sandbox QA Review

## 7. OMG WHY ARE YOU SHOUTING?

mandatory

Score: 100.0% (Checks completed: 100.0%)



Requirement:

- The regular expression must be only matching: capital letters

Example:

```
sylvain@ubuntu$ ./7-OMG_WHY_ARE_YOU_SHOUTING.rb "I really hOpe VancouvEr posseSs Yumm  
y Soft vAnilla Dupper Mint Ice Nutella cream" | cat -e  
ILOVESYSADMIN$  
sylvain@ubuntu$ ./7-OMG_WHY_ARE_YOU_SHOUTING.rb "WHAT do you SAY?" | cat -e  
WHATSAY$  
sylvain@ubuntu$ ./7-OMG_WHY_ARE_YOU_SHOUTING.rb "cannot read you" | cat -e  
$  
sylvain@ubuntu$
```

Repo:

- GitHub repository: [alx-system\\_engineering-devops](#)
- Directory: [0x06-regular\\_expressions](#)

- File: `7-OMG_WHY_ARE_YOU_SHOUTING.rb`

Done! Help Check your code Get a sandbox QA Review

## 8. Textme

#advanced

Score: 100.0% (Checks completed: 100.0%)

This exercise was prepared for you by **Guillaume Plessis**, VP of Infrastructure at TextMe. It is something he uses daily. You can thank Guillaume for his project [on Twitter](#).

For this task, you'll be taking over Guillaume's responsibilities: one afternoon, a TextMe VoIP Engineer comes to you and explains she wants to run some statistics on the TextMe app text messages transactions.

Requirements:

- Your script should output: `[SENDER], [RECEIVER], [FLAGS]`
  - The sender phone number or name (including country code if present)
  - The receiver phone number or name (including country code if present)
  - The flags that were used

You can find a [log file here](#).

Example:

```
$ ./100-textme.rb 'Feb 1 11:00:00 ip-10-0-0-11 mdr: 2016-02-01 11:00:00 Receive SMS [SMSC:SYBASE1] [SVC:] [ACT:] [BINF:] [FID:] [from:Google] [to:+16474951758] [flags:-1:0:-1:0:-1] [msg:127:This planet has - or rather had - a problem, which was this: most of the people on it were unhappy for pretty much of the time.] [udh:0:]'
```

```
Google,+16474951758,-1:0:-1:0:-1
```

```
$
```

```
$
```

```
$ ./100-textme.rb 'Feb 1 11:00:00 ip-10-0-64-10 mdr: 2016-02-01 11:00:00 Receive SMS [SMSC:SYBASE2] [SVC:] [ACT:] [BINF:] [FID:] [from:+17272713208] [to:+19172319348] [flags:-1:0:-1:0:-1] [msg:136:Orbiting this at a distance of roughly ninety-two million miles is an utterly insignificant little blue green planet whose ape-descended] [udh:0:]'
```

```
+17272713208,+19172319348,-1:0:-1:0:-1
```

```
$
```

```
$ ./100-textme.rb 'Feb 1 11:00:00 ip-10-0-64-11 mdr: 2016-02-01 11:00:00 Sent SMS [SMSC:SYBASE1] [SVC:backendtextme] [ACT:] [BINF:] [FID:] [from:18572406905] [to:14022180266] [flags:-1:0:-1:-1:-1] [msg:136:Far out in the uncharted backwaters of the unfashionable end of the western spiral arm of the Galaxy lies a small unregarded yellow sun.] [udh:0:]'
```

```
18572406905,14022180266,-1:0:-1:-1:-1
```



```
$  
$  
$ ./100-textme.rb 'Feb 1 11:00:00 ip-10-0-64-11 mdr: 2016-02-01 11:00:00 Sent SMS [SM  
SC:SYBASE1] [SVC:backendtextme] [ACT:] [BINF:] [FID:] [from:12392190384] [to:19148265  
919] [flags:-1:0:-1:-1:-1] [msg:99:life forms are so amazingly primitive that they st  
ill think digital watches are a pretty neat idea.] [udh:0:]'  
12392190384,19148265919,-1:0:-1:-1:-1  
$
```

## Repo:

- GitHub repository: [alx-system\\_engineering-devops](#)
- Directory: [0x06-regular\\_expressions](#)
- File: [100-textme.rb](#)

Done! Help Check your code Get a sandbox QA Review

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