

README 20130570 전철호

제출물: 소스코드, 실행가능파일, 간단한 메뉴얼

소스코드: Please refer to main.py. It is within the zip file I attached, or you can clone it from <https://github.com/adobecs5/automata2015/tree/master/1>

실행가능파일: please refer to main.py

(how to execute: regardless of OS, open your terminal and type “python3 main.py”)

(This code needs python3 to run. It is coded with python 3.4.3)

간단한 메뉴얼:

1. **Start the program by typing “python3 main.py” on the directory you downloaded the files.**

```
Cheolhos-MacBook-Pro:1 CJeon$ cd /Users/CJeon/Library/Mobile Documents/com~apple~CloudDocs/automata2015/1
Cheolhos-MacBook-Pro:1 CJeon$ python3 main.py
3.4.3 (default, Sep  3 2015, 13:56:13)
[GCC 4.2.1 Compatible Apple LLVM 6.1.0 (clang-602.0.53)]
This python code is optimized for python 3.4.3
```

This will automatically print the python version you are on.

If you run this code on python2, you will see the error below

```
Cheolhos-MacBook-Pro:1 CJeon$ python main.py
File "main.py", line 5
SyntaxError: Non-ASCII character '\xec' in file main.py on line 6, but no encoding declared; see http://python.org/dev/peps/pep-0263/ for details
```

2. **After successfully running the file, you will be asked to provide a datapath for DFA data.**

```
Hi, welcome to the DFA simulator.
Specify input data path. If you want to use the default input(DFA_data), just press enter.
>> █
```

You could either provide your own datapath or choose to use provided test input.

Provided tests are in txt formats.

If you input wrong filenames, below error will occur.

```
Hi, welcome to the DFA simulator.
Specify input data path. If you want to use the default input(DFA_data), just press enter.
>> random name
[Errno 2] No such file or directory: 'random name'
try again
```

if you input correct filename, below will be printed.

```
Hi, welcome to the DFA simulator.
Specify input data path. If you want to use the default input(DFA_data), just press enter.
>> DFA_data2.txt
Print data successfully loaded.
```

3. After successfully loading the data, you will be asked to provide an initial state.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: █
```

You can just press enter. If you give empty string as input, the program will use predefined start state as initial state.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is:  
language is: 1111  
last state is S1  
네
```

Or you can provide your own initial state.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: S0  
language is: 1111  
last state is S1  
네
```

If you provide undefined initial state, you will see the below error message.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: random_state  
language is: 1111  
Exception occurred. ('Undefined state', 'random_state', 'defined states are', ['S0', 'S1', 'S2', 'S3', 'S4'])
```

You can also set your own initial state.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: S0  
language is: 1111  
last state is S1  
네
```

4. After giving initial state, you will be asked to provide a language to be processed. You can give empty string as an input, which will return the initial state.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: S0  
language is:  
last state is S0  
아니요
```

If you give undefined language, the program will return following error

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: S0  
language is: random_input  
Exception occurred. ('string is not a language', 'random_input', 'Allowed alphabets are', ['1', '2', '3', '4'])
```

If you provide correct input, the program will execute as follows.

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: S0  
language is: 123123123  
last state is S3  
네
```

```
Please specify the initial state(optional), and the language to be tested.  
initial state is: S0  
language is:  
last state is S0  
아니요
```

It prints the last state and prints “네” or “아니오” depending on the execution results.

To terminate the program, raise keyboard interrupt in your own terminal.
Thanks for reading so far.