

Practical 6. Working with Strings

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5.1 Objectives

- Practice python coding with strings
- Learn to program with the help of online references

5.2 Introduction

In this practical, you will write python codes for one problem. You may need to look for online references to complete this assignment, which is also a good practice on how to ask right questions. You are expected to use version control systems (e.g. git) to store your codes. After this practical, the tutorial session may give you an opportunity to share your codes to your peers and receive critical reviews for improvement of your codes. You may continue to make them better.

In class, your instructors are there to help. Please don't be shy about asking them. Once you have completed the assignment, you are free to leave.

5.3 Problems to solve

Sending emails!

Problem: Given that you have a list of email address and one important analysis report to be sent to them. Try to send e-mails to those people in the list using python!

Consider the following steps:

- 1) Determine whether the email address is legal.

- use `open()` function to open `address_information.csv`
- get the comma-separated information using regex `re.split()`
- find which address is legal and discard the wrong ones `re.match()`

2) Send Emails to people who with right email addresses.

- subject is included in `address_information.csv`
- you can find the body information in `body.txt`, but for different users, you need to replace the salutation 12(Dear **User**;) with their names like this:

Dear **David**,

Please find the results of your gene set linkage analysis result in attached file.

This is an email sent by the server, please don't reply.

Thank you for using GSLA.

- using loops and SMTP to send all emails

Given:

`address_information.csv` (contains users' names, email addresses and email subjects)

`body.txt` (contains email body, but it needs to be modified for different users)

Return:

- Which email address is correct
- Send Emails.

Example:

```
>>>ibifiletest@163.com :Correct Address!
>>>python@zju :Wrong Address!
>>>ibifiletest2@163.com :Correct Address!
>>>ibifiletest3@163.com :Correct Address!
>>>From: synergylab@zju.edu.cn
>>>Password: *****
>>>Mail sent successfully!
```

```
>>>Mail sent successfully!  
>>>Mail sent successfully!
```

Tips:

- for email like 'synergylab@zju.edu.cn', server = smtplib.SMTP('smtp.zju.edu.cn',25)
- Set Header to correct properties
- for server.login(loginname, password), the loginname refer to the part before '@'

Notice: all passwords for email address in the list is : abc123456

