

### User Guide:

1. First of all, when users run the program, the users will be asked to input 'output=brief' or 'output=full' to determine whether the view mode is full or brief. Then, users need to input the specific grammar to process the instructions they wanted. The algorithm of inputting grammar will check and analyze the user input and get into the different sections of information processions. In the program, the different sections will be built and linked to the algorithm of inputting. It will process like:
  - a) get the records of the email which contains some specific information in the subject field and body field.
  - b) get the email the needed person sent and received.
  - c) get the email before or after the given date.
  - d) get the records of email that have the specific email address in the cc or bcc field.

After the program gets the user's instructions and executes them successfully, the program will print the answer on the screen. If the users still want to use the different functions, it will return to the original menu. If the users want to exit the program, then just press 'q'.

### The Algorithm:

1. Our algorithm is quite simple. If the users input the given instructions, our program will try to figure out whether the instruction is valid or not. It will use the 'split' function to analyze which functions the users want to use. Then, it will bring the specific contents into our functions and process it and print the result on the screen.

### Group work strategy:

1. Our project is divided into three parts, and every group member had contributed evenly and fairly.  
Yating Zhao is responsible for the Task\_1(Questions 5, 6, 7, 8)

Haochen Gou is responsible for the Phrase 1,2 and Phrase 3(Question 9,10)

Peilin Li is responsible for the Phrase (Questions 1, 2, 3, 4) and Project Report.

#### Testing strategy:

1. We used the data from the given material In order to fit our requirements and specific conditions. First of all, we complete the Phrase1 and Phrase2 to create the data structure and information which are used to analyzed and processed by queries. Then, we run the python program on the laptop and observe whether the program will process and return the results correctly.