

## 第四周作业

1.

```
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode
$ git clone https://gitcode.com/AAdjrxj/week04.git
Cloning into 'week04'...
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 5 (delta 0), reused 5 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (5/5), 8.43 KiB | 12.00 KiB/s, done.

(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode
$ cd week04

(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ pwd
/d/gitcode/week04

(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ git remote show origin
* remote origin
Fetch URL: https://gitcode.com/AAdjrxj/week04.git
Push URL: https://gitcode.com/AAdjrxj/week04.git
HEAD branch: main
Remote branch:
  main tracked
Local branch configured for 'git pull':
  main merges with remote main
Local ref configured for 'git push':
  main pushes to main (up to date)
```

2.

```
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ ls -l
total 26
-rw-r--r-- 1 12460 197609 203 3月 29 10:38 contacts.txt
-rw-r--r-- 1 12460 197609 76 3月 29 10:32 environment.yml
-rw-r--r-- 1 12460 197609 18805 3月 29 10:18 LICENSE
-rw-r--r-- 1 12460 197609 2239 3月 29 10:18 README.md

(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ cat contacts.txt
白展堂 男 baizhantang@163.com
佟湘玉 女 tongxiangyu@163.com
吕轻侯 男 lvqinghou@126.com
郭芙蓉 女 guofurong@126.com
李秀莲 男 lixiulian@163.com
祝无双 女 zhuwushuang@163.com
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$
```

3. 要求输出是先按邮箱域名排序 (126.com 排在 163.com 之前), 然后再按邮箱用户名排序 (guofurong 排在 lvqinghou 之前)
4. 按照 ai 写代码运行, 但是运行结果需要调试

```
return emails

def sort_contacts(contacts):
    def sort_key(contact):
        email = contact
        username, domain = email.split("@")
        return (domain, username)

    return sorted(contacts, key=sort_key)

def write_emails(emails, output_file):
    try:
        with open(output_file, "w", encoding="utf-8") as file:
            for email in emails:
                file.write(email + "\n")
    except Exception as e:
        print(f"错误: 写入文件 {output_file} 时发生未知错误: {e}")

if __name__ == "__main__":
    contacts = read_contacts("contacts.txt")
    sorted_contacts = sort_contacts(contacts)
    emails = generate_emails(sorted_contacts)
    write_emails(emails, "emails.txt")
    print("邮件通知已生成并保存到 emails.txt 文件中。")

(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ cat main.py
def read_contacts(file_path):
    try:
        contacts = []
        with open(file_path, "r", encoding="utf-8") as file:
            for line in file:
                parts = line.strip().split()
                if len(parts) == 3:
                    name, gender, email = parts
                    contacts.append((name, gender, email))
        return contacts
    except FileNotFoundError:
        print(f"错误: 文件 {file_path} 未找到。")
        return []
    except Exception as e:
        print(f"错误: 读取文件时发生未知错误: {e}")
        return []

def generate_emails(contacts):
    emails = []
    for name, gender, email in contacts:
        title = "先生" if gender == "男" else "女士"
        email_content = f"to: <{email}>\n尊敬的 {name}{title}, 您的会员"
        emails.append(email_content)
    return emails
```

5. 在按照 `conda env create` 时发现环境一直创建失败，因此询问豆包后重新换方法在 week04 创建环境

```
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ conda env list
# conda environments:
#
base                  * F:\python\conda
myproject             F:\python\conda\envs\myproject
prj1                  F:\python\conda\envs\prj1
prj2                  F:\python\conda\envs\prj2

(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ conda env create
F:\python\conda\Lib\argparse.py:2006: FutureWarning: `remote_definition` is deprecated and will be removed in a future version. Use `remote_reference` instead.
  action(self, namespace, argument_values, option_string)
Channels:
- conda-forge
- defaults
- https://repo.anaconda.com/pkgs/main
- https://repo.anaconda.com/pkgs/r
- https://repo.anaconda.com/pkgs/msys2
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: failed

PackagesNotFoundError: The following packages are not available from current channels:
```

```
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ conda create -n environment.yml python=3.12 --channel conda-forge
Channels:
- conda-forge
- defaults
```

```
(base) 12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ conda env list
# conda environments:
#
base                  * F:\python\conda
myproject             F:\python\conda\envs\myproject
prj1                  F:\python\conda\envs\prj1
prj2                  F:\python\conda\envs\prj2
week04                F:\python\conda\envs\week04
```



6.

```
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ python main.py
邮件通知已生成并保存到 emails.txt 文件中。
(week04)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ ls -l
total 31
-rw-r--r-- 1 12460 197609 205 3月 29 10:39 contacts.txt
-rw-r--r-- 1 12460 197609 672 3月 29 11:28 emails.txt
-rw-r--r-- 1 12460 197609 76 3月 29 10:32 environment.yml
-rw-r--r-- 1 12460 197609 18805 3月 29 10:18 LICENSE
-rw-r--r-- 1 12460 197609 1738 3月 29 10:44 main.py
-rw-r--r-- 1 12460 197609 2239 3月 29 10:18 README.md
```

7. 运行查看

```
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ ls -l
total 31
-rw-r--r-- 1 12460 197609 205 3月 29 10:39 contacts.txt
-rw-r--r-- 1 12460 197609 672 3月 29 11:28 emails.txt
-rw-r--r-- 1 12460 197609 76 3月 29 10:32 environment.yml
-rw-r--r-- 1 12460 197609 18805 3月 29 10:18 LICENSE
-rw-r--r-- 1 12460 197609 1738 3月 29 10:44 main.py
-rw-r--r-- 1 12460 197609 2239 3月 29 10:18 README.md
(week04)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ cat emails.txt
to: <guofurong@126.com>
尊敬的 郭芙蓉女士，您的会员资格即将到期，请及时续费。
---
to: <lvqinghou@126.com>
尊敬的 吕轻侯先生，您的会员资格即将到期，请及时续费。
---
to: <baizhantang@163.com>
尊敬的 白展堂先生，您的会员资格即将到期，请及时续费。
---
to: <lixiluan@163.com>
尊敬的 李秀莲先生，您的会员资格即将到期，请及时续费。
---
to: <tongxiangyu@163.com>
尊敬的 佟湘玉女士，您的会员资格即将到期，请及时续费。
---
to: <zhuwushuang@163.com>
尊敬的 祝无双女士，您的会员资格即将到期，请及时续费。
---
```

8. 运行解释器

```
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ ls -l
total 30
-rw-r--r-- 1 12460 197609 205 3月 29 10:39 contacts.txt
-rw-r--r-- 1 12460 197609 76 3月 29 10:32 environment.yml
-rw-r--r-- 1 12460 197609 18805 3月 29 10:18 LICENSE
-rw-r--r-- 1 12460 197609 1738 3月 29 10:44 main.py
-rw-r--r-- 1 12460 197609 2239 3月 29 10:18 README.md
(week04)
12460@LAPTOP-T1VTLFCA MINGW64 /d/gitcode/week04 (main)
$ python -m pdb main.py
> d:\gitcode\week04\main.py(1)<module>()
-> def read_contacts(file_path):
(Pdb)
```

9.

```
27
28 def sort_contacts(contacts):
29     def sort_key(contact):
30         _, _, email = contact
31         username, domain = email.split("@")
32         return (domain, username)
33
34     return sorted(contacts, key=sort_key)
35
36
37 def write_emails(emails, output_file):
38     try:
39         with open(output_file, "w", encoding="utf-8") as file:
40             for email in emails:
41                 file.write(email + "\n")
42     except Exception as e:
43         print(f"错误: 写入文件 {output_file} 时发生未知错误: {e}")
44
45
46 -> if __name__ == "__main__":
47     contacts = read_contacts("contacts.txt")
48     sorted_contacts = sort_contacts(contacts)
49     emails = generate_emails(sorted_contacts)
50     write_emails(emails, "emails.txt")
51     print("邮件通知已生成并保存到 emails.txt 文件中。")
Pdb) p write_emails
function write_emails at 0x0000018EBF9036A0>
```