```python
file_name = input("Enter a file name: ")
try:
    with open(file_name, 'r') as file:
        day_counts = {}

        for line in file:
            if line.startswith("From "):
                words = line.split()
                if len(words) >= 3:
                    day = words[2]
                    day_counts[day] = day_counts.get(day, 0) + 1

        print(day_counts)

except FileNotFoundError:
    print(f"File '{file_name}' not found.")
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/chuong9,10,11,12/c9ex2.py
Enter a file name: mbox-short.txt
{'Sat': 1, 'Fri': 20, 'Thu': 6}
PS C:\Test_STM32\Test_STM32>
```

```python
file_name = input("Enter file name: ")
try:
    with open(file_name, 'r') as file:
        email_counts = {}

        for line in file:
            if line.startswith("From "):
                words = line.split()
                if len(words) >= 2:
                    email = words[1]
                    email_counts[email] = email_counts.get(email, 0) + 1

        print(email_counts)

except FileNotFoundError:
    print(f"File '{file_name}' not found.")
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c9ex3.py
Enter file name: mbox-short.txt
{'stephen.marquard@uct.ac.za': 1, 'louis@media.berkeley.edu': 1, 'zqian@umich.edu': 1, 'ray@media.ber
keley.edu': 1, 'cwen@iupui.edu': 3}
PS C:\Test_STM32\Test_STM32>
```

Test_STM32 > c9ex4.py > ...

```python
ten_file = input("Enter a file name: ")

with open(ten_file) as f:
    dem = {}

    for dong in f:
        if dong.startswith("From "):
            tach = dong.split()
            email = tach[1]
            dem[email] = dem.get(email, 0) + 1

nguoi_nhieu_nhat = None
so_luong_max = 0

for email, so_luong in dem.items():
    if so_luong > so_luong_max:
        so_luong_max = so_luong
        nguoi_nhieu_nhat = email

print(nguoi_nhieu_nhat, so_luong_max)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c9ex4.py
Enter a file name: mbox-short.txt
cwen@iupui.edu 5
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c9ex4.py
Enter a file name: mbox.txt
zqian@umich.edu 195
PS C:\Test_STM32\Test_STM32>
```

Test_STM32 > c9ex5.py > ...

```python
ten_file = input("Enter a file name: ")

domain_count = {}

with open(ten_file) as f:
    for dong in f:
        if dong.startswith("From "):
            tach = dong.split()
            email = tach[1]
            domain = email.split("@")[1]
            domain_count[domain] = domain_count.get(domain, 0) + 1

print(domain_count)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c9ex5.py
Enter a file name: mbox-short.txt
{'uct.ac.za': 6, 'media.berkeley.edu': 4, 'umich.edu': 7, 'iupui.edu': 8, 'caret.cam.ac.uk': 1, 'gmai
l.com': 1}
PS C:\Test_STM32\Test_STM32>
```

Test_STM32 > c10ex1.py > ...

```python
ten_file = input("Enter a file name: ")
dem = {}

with open(ten_file) as f:
    for dong in f:
        if dong.startswith("From "):
            email = dong.split()[1]
            dem[email] = dem.get(email, 0) + 1

danh_sach = []
for email, so_luong in dem.items():
    danh_sach.append((so_luong, email))

danh_sach.sort(reverse=True)

print(danh_sach[0][1], danh_sach[0][0])
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c10ex1.py
Enter a file name: mbox-short.txt
cwen@iupui.edu 5
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c10ex1.py
Enter a file name: mbox.txt
zqian@umich.edu 195
PS C:\Test_STM32\Test_STM32> []
```

Test_STM32 > c10ex2.py > ...

```python
ten_file = input("Enter a file name: ")
gio_dem = {}

with open(ten_file) as f:
    for dong in f:
        if dong.startswith("From "):
            tach = dong.split()
            if len(tach) < 6: continue
            thoi_gian = tach[5]
            gio = thoi_gian.split(":")[0]
            gio_dem[gio] = gio_dem.get(gio, 0) + 1

for gio, so_luong in sorted(gio_dem.items()):
    print(gio, so_luong)
```

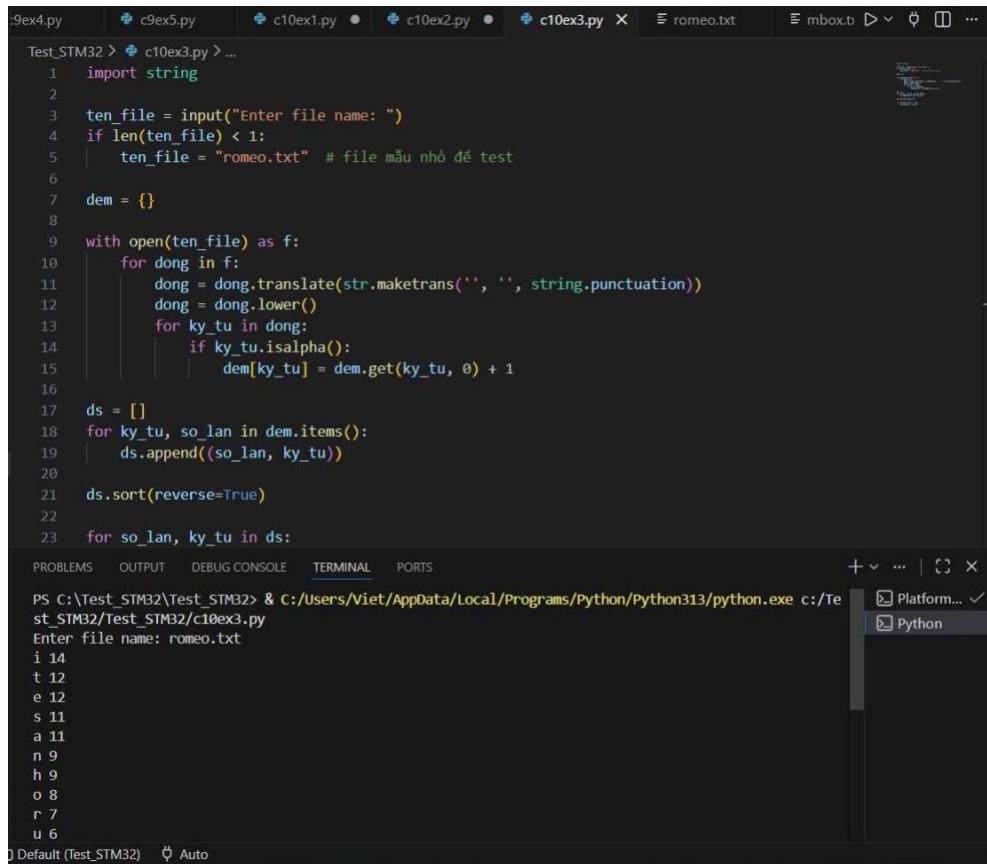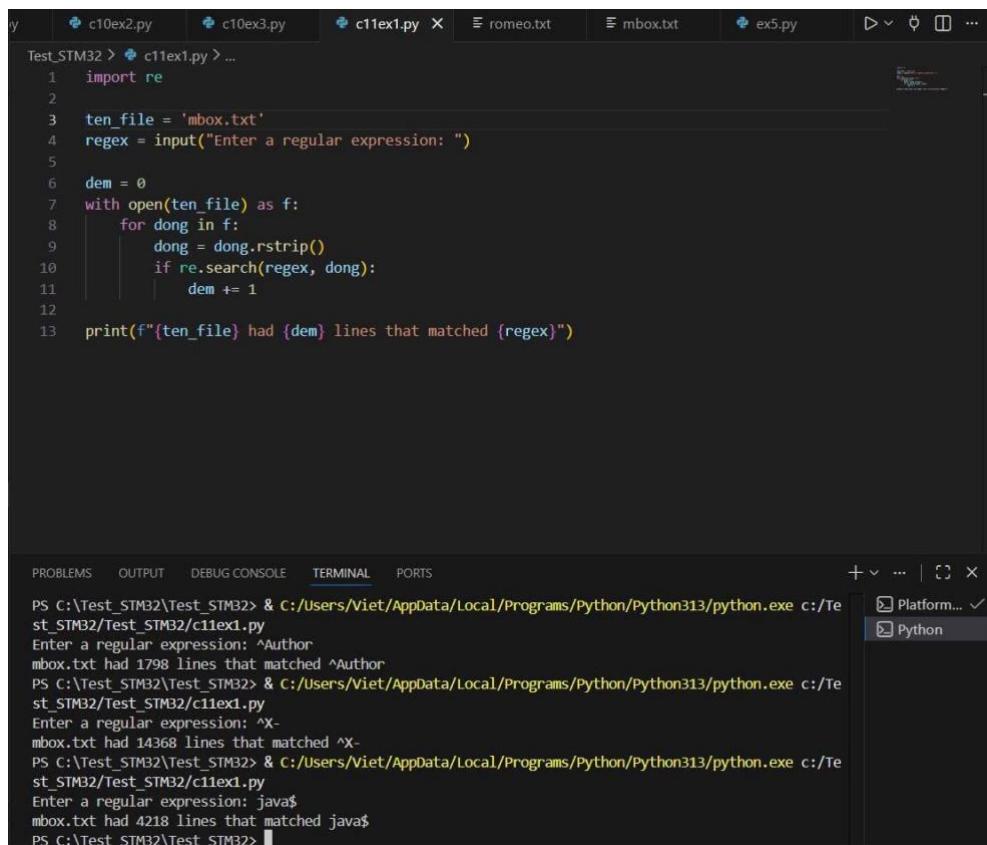PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c10ex2.py
Enter a file name: mbox-short.txt
04 3
06 1
07 1
09 2
10 3
11 6
14 1
15 2
16 4
17 2
```

Test_STM32 > c10ex3.py > ...

```python
1    import string
2
3    ten_file = input("Enter file name: ")
4    if len(ten_file) < 1:
5        ten_file = "romeo.txt"  # file mẫu nhỏ để test
6
7    dem = {}
8
9    with open(ten_file) as f:
10       for dong in f:
11           dong = dong.translate(str.maketrans('', '', string.punctuation))
12           dong = dong.lower()
13           for ky_tu in dong:
14               if ky_tu.isalpha():
15                   dem[ky_tu] = dem.get(ky_tu, 0) + 1
16
17   ds = []
18   for ky_tu, so_lan in dem.items():
19       ds.append((so_lan, ky_tu))
20
21   ds.sort(reverse=True)
22
23   for so_lan, ky_tu in ds:
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c10ex3.py
Enter file name: romeo.txt
i 14
t 12
e 12
s 11
a 11
n 9
h 9
o 8
r 7
u 6
```

Default (Test_STM32)   Auto

Test_STM32 > c11ex1.py > ...

```python
1    import re
2
3    ten_file = 'mbox.txt'
4    regex = input("Enter a regular expression: ")
5
6    dem = 0
7    with open(ten_file) as f:
8        for dong in f:
9            dong = dong.rstrip()
10           if re.search(regex, dong):
11               dem += 1
12
13   print(f"{ten_file} had {dem} lines that matched {regex}")
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c11ex1.py
Enter a regular expression: ^Author
mbox.txt had 1798 lines that matched ^Author
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c11ex1.py
Enter a regular expression: ^X-
mbox.txt had 14368 lines that matched ^X-
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c11ex1.py
Enter a regular expression: java$
mbox.txt had 4218 lines that matched java$
PS C:\Test_STM32\Test_STM32>
```

Test_STM32 > c11ex2.py > ...

```python
1    import re
2
3    ten_file = input("Enter file: ")
4    if len(ten_file) < 1:
5        ten_file = "mbox-short.txt"
6
7    tong = 0
8    dem = 0
9
10   with open(ten_file) as f:
11       for dong in f:
12           dong = dong.rstrip()
13
14           x = re.findall('^New Revision: ([0-9]+)', dong)
15           if len(x) == 1:
16               so = int(x[0])
17               tong += so
18               dem += 1
19
20   if dem > 0:
21       trung_binh = tong / dem
22       print(trung_binh)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c11ex2.py
Enter file: mbox.txt
38549.79497206704
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c11ex2.py
Enter file: mbox-short.txt
39756.92592592593
PS C:\Test_STM32\Test_STM32>
```

Test_STM32 > c12ex1.py > ...

```python
1    import urllib.request, urllib.parse, urllib.error
2    import xml.etree.ElementTree as ET
3    import ssl
4
5    api_key = False
6    # If you have a Google Places API key, enter it here
7    # api_key = 'AIzaSy___IDByT70'
8    # https://developers.google.com/maps/documentation/geocoding/intro
9
10   if api_key is False:
11       api_key = 42
12       serviceurl = 'http://py4e-data.dr-chuck.net/xml?'
13   else :
14       serviceurl = 'https://maps.googleapis.com/maps/api/geocode/xml?'
15
16   # Ignore SSL certificate errors
17   ctx = ssl.create_default_context()
18   ctx.check_hostname = False
19   ctx.verify_mode = ssl.CERT_NONE
20
21   while True:
22       address = input('Enter location: ')
23       if len(address) < 1: break
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

```
PS C:\Test_STM32\Test_STM32> & C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/Te
st_STM32/Test_STM32/c12ex1.py
Enter location: Atlantis Ocean& C:/Users/Viet/AppData/Local/Programs/Python/Python313/python.exe c:/T
est_STM32/Test_STM32/c12ex1.py
Retrieving http://py4e-data.dr-chuck.net/xml?address=Atlantis+Ocean%26+C%3A%2FUsers%2FViet%2FAppData%
2FLocal%2FPrograms%2FPython%2FPython313%2Fpython.exe+c%3A%2FTest_STM32%2FTest_STM32%2Fc12ex1.py&key=4
2
Retrieved 175 characters
<?xml version="1.0" encoding="UTF-8"?>
<GeocodeResponse>
 <status>REQUEST_DENIED</status>
 <error_message>The provided API key is expired. </error_message>
</GeocodeResponse>
```