

Q1.

```
import threading

value = 0
thread_lock = threading.Lock()

class MyThread(threading.Thread):
    def __init__(self, name):
        threading.Thread.__init__(self)
        self.name = name
    def run(self):
        thread_lock.acquire(1)
        global value
        value += 5
        thread_lock.release()

thread1 = MyThread('A')
thread2 = MyThread('B')
thread3 = MyThread('C')
thread4 = MyThread('D')

thread1.start()
thread2.start()
thread3.start()
thread4.start()

thread1.join()
thread2.join()
thread3.join()
thread4.join()
print("Value =", value)
```

Output:

Value = 20

Q2.

```
count = 0
dictionary_words = dict()

fhand = open('words.txt')
for line in fhand:
    words = line.split()
```

```

    for word in words:
        dictionary_words[word] = 1

word = input('Enter a word: ')
if word in dictionary_words:
    print(word, 'was found')
else:
    print(word, 'was not found')

```

Output:

Enter a word: Python

Python was not found

Enter a word: We

We was found

Q3.

```

import re
dictionary_days = dict()
fname = input('Enter a file name: ')
try:
    fhand = open(fname)
except FileNotFoundError:
    print('File cannot be opened:', fname)
    exit()

for line in fhand:
    if(re.search('^From', line)):
        words = line.split()
        ind = 0
        day = ''
        for word in words:
            if(ind == 2):
                day = word
                if(day in dictionary_days):
                    dictionary_days[day] = dictionary_days[day] + 1;
                else:
                    dictionary_days[day] = 1;
            ind = ind + 1
print(dictionary_days)

```

Output:

Enter a file name: mbox-short.txt

```
{'Sat': 1, 'Fri': 20, 'Thu': 6}
```