1.

import re

msg1 = 'I love Ming-Chi: 是大陸手機號碼'

msg2 = '0932-999-199: 是大陸手機號碼'

msg3 = '133-1234-1234: 是大陸手機號碼'

def parseString(string):

phoneRule = re.compile(r'\d\d\d-\d\d\d\d-\d\d\d\d')

phoneNum = phoneRule.search(string)

if phoneNum != None:

print(string, 'True')

else:

print(string, 'False')

parseString(msg1)

parseString(msg2)

parseString(msg3)

2.

import re

msg1 = 'Please call my secretary using 0930-919-919 or 0952-001-001'

msg2 = '請明天17:30和我一起參加明志科大教師節晚餐'

msg3 = '請明天17:30和我一起參加明志科大教師節晚餐, 可用0933-080-080聯絡我'

def parseString(string):

pattern = r'\d{4}-\d{3}-\d{3}'

phoneNum = re.search(pattern, string)

if phoneNum != None:

print('電話號碼是: %s' % phoneNum.group())

else:

print('%s 字串不含電話號碼' % string)

parseString(msg1)

parseString(msg2)

parseString(msg3)

3.

import re

msg1 = 'Please call my secretary using 0930-919-919 or 0952-001-001'

msg2 = '請明天17:30和我一起參加明志科大教師節晚餐'

msg3 = '請明天17:30和我一起參加明志科大教師節晚餐, 可用0933-080-080聯絡我'

def parseString(string):

pattern = r'(\d{4})-(\d{3})-(\d{3})'

phoneNum = re.findall(pattern, string)

print('電話號碼是: %s' % phoneNum)

parseString(msg1)

parseString(msg2)

parseString(msg3)

4.

msg = '我喜歡看小龍女與楊過，不僅因為小龍女美麗，楊過在戲中所扮演的角色更是讓我喜歡。'

while True:

s = str(input('請輸入搜尋字串:'))

print('所搜尋字串 %s 共出現' % s, msg.count(s), '次')

print('')

n = str(input('是否繼續，輸入Y或y則程式繼續，否則結束:'))

print('')

if n != 'Y' and n != 'y':

break

5.

import re

def searchStr(pattern, msg):

txt = re.search(pattern, msg)

if txt == None:

print('搜尋失敗', txt)

else:

print('搜尋成功', txt.group())

msg1 = 'son'

msg2 = 'sonson'

msg3 = 'sonsonson'

msg4 = 'sonsonsonson'

msg5 = 'sonsonsonsonson'

pattern1 = '(son){2,}'

pattern2 = '(son){,5}'

print('以下用(son){2,}測試')

searchStr(pattern1,msg1)

searchStr(pattern1,msg2)

searchStr(pattern1,msg3)

searchStr(pattern1,msg4)

searchStr(pattern1,msg5)

print('以下用(son){,5}測試')

searchStr(pattern2,msg1)

searchStr(pattern2,msg2)

searchStr(pattern2,msg3)

searchStr(pattern2,msg4)

searchStr(pattern2,msg5)

6.

import re

def searchStr(pattern, msg):

txt = re.search(pattern, msg)

if txt == None:

print('搜尋失敗', txt)

else:

print('搜尋成功', txt.group())

msg = 'sonsonsonsonson'

pattern1 = '(son){3,5}'

print('以下用(son){3,5}測試')

searchStr(pattern1,msg)

pattern2 = '(son){3,5}?'

print('以下用(son){3,5}?測試')

searchStr(pattern2,msg)

7.

import re

msg = '1 cat, 2 dogs, 3 pigs, 4 swans'

pattern = '[aeiouAEIOU 2-5]'

txt = re.findall(pattern,msg)

print(txt)

8.

import re

msg1 = '0932895453'

msg2 = '09328ss453'

pattern = '^\d+$'

txt1 = re.findall(pattern,msg1)

txt2 = re.findall(pattern,msg2)

print(txt1)

print(txt2)

9.

import re

msg = '''02-88223349, (02)-26669999, 02-29998888 ext 123,

12345678, 02 33887766 ext. 12222,

02-1234567, 02-123456789, 23-123456'''

pattern = r'''(

(\d{2}|\(\d{2}\))?

(\s|-)?

\d{7,8}

(\s\*(ext|ext.)\s\*\d{2,4})?

)'''

phoneNum = re.findall(pattern, msg, re.VERBOSE)

print(phoneNum)

10.

import re

msg = '''txt@deepstone.com.tw kkk@gmail.com

abc@me.com mymail@qq.com abc@abc@abc'''

pattern = r'''(

[a-zA-Z0-9-.]+

@

[a-zA-Z0-9-.]+

[\.]

[a-zA-Z]{2,4}

([\.])?

([a-zA-Z]{2,4})?

)'''

eMail = re.findall(pattern, msg, re.VERBOSE)

print(eMail)