#1  
*'''  
dictionary\_addresses = dict()  
lst = list()  
  
fname = input('Enter file name: ')  
try:  
 fhand = open(fname)  
except FileNotFoundError:  
 print('File cannot be opened:', fname)  
 quit()  
  
for line in fhand:  
 words = line.split()  
 if len(words) < 2 or words[0] != 'From':  
 continue  
 else:  
 if words[1] not in dictionary\_addresses:  
 dictionary\_addresses[words[1]] = 1  
 else:  
 dictionary\_addresses[words[1]] += 1  
  
for key, val in list(dictionary\_addresses.items()):  
 lst.append((val, key))  
  
lst.sort(reverse=True)  
  
for count, email in lst[:1]:  
 print(email, count)  
'''*#2  
'''  
dictionary\_hours = dict()   
lst = list()  
  
fname = input('Enter file name: ')  
try:  
 fhand = open(fname)  
except FileNotFoundError:  
 print('File cannot be opened:', fname)  
 quit()  
  
for line in fhand:  
 words = line.split()  
 if len(words) < 5 or words[0] != 'From':  
 continue  
  
 col\_pos = words[5].find(':')  
 hour = words[5][:col\_pos]  
 if hour not in dictionary\_hours:  
 dictionary\_hours[hour] = 1   
 else:  
 dictionary\_hours[hour] += 1   
  
for key, val in list(dictionary\_hours.items()):  
 lst.append((key, val))   
  
lst.sort()  
  
for key, val in lst:  
 print(key, val)  
'''  
  
#3  
'''  
import string  
  
counts = 0   
dictionary\_counts = dict()  
relative\_lst = list()  
  
fname = input('Enter file name: ')  
try:  
 fhand = open(fname)  
except FileNotFoundError:  
 print('File cannot be opened:', fname)  
 exit()  
  
for line in fhand:  
 line = line.translate(str.maketrans('', '', string.digits))  
 line = line.translate(str.maketrans('', '', string.punctuation))  
 line = line.lower()  
  
 words = line.split()  
 for word in words:  
 for letter in word:  
 counts += 1  
 if letter not in dictionary\_counts:  
 dictionary\_counts[letter] = 1  
 else:  
 dictionary\_counts[letter] += 1  
  
for key, val in list(dictionary\_counts.items()):  
 relative\_lst.append((val / counts, key))  
  
relative\_lst.sort(reverse=True)  
  
for key, val in relative\_lst:  
 print(key, val)  
'''