Submission

ID	DATE	PROBLEM	STATUS	CPU	LANG
	TEST CASES				
4790508	12:19:30	Virus Replication	✔ **Accepted**	0.57 s	Python 3
	✔✔✔✔✔✔✔✔✔✔✔✔✔				

Submission contains 1 file: download zip archive

FILENAME	FILESIZE	SHA-1 SUM	
virus_260621270.py	574 bytes	c18a5f96d9e6934fafe903208156955f417be81d	download

Edit and resubmit this submission.

virus_260621270.py

```
 1 # before is the first line
 2 # after is the second line
 3 # The program starts trimming from the front it stops when a char in the first
 4 # string doesn't correspond with the second string. Then it does the same
 5 # thing from the reverse and returns the length of the remainder or
 6 # the virus itself.
 7
 8 before = input()
 9 after = input()
10
11 while(len(before)!=0 and len(after)!=0 and before[0] == after[0]):
12   before = before[1:]
13   after = after[1:]
14
15 while(len(before)!=0 and len(after)!=0 and before[-1] == after[-1]):
16   before = before[:-1]
17   after = after[:-1]
18
19 print(len(after))
```

Submission

ID	DATE	PROBLEM	STATUS	CPU	LANG
	TEST CASES				
4803501	16:02:46	Restaurant Orders	✔ **Accepted**	0.17 s	Python 3
	✔✔✔✔✔✔✔✔✔✔✔✔				

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FILENAME	FILESIZE	SHA-1 SUM	
orders_260621270.py	1324 bytes	`af6f19867cb432a21928ffc64a3cbdd97e6b114c`	download

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orders_260621270.py

```
 1 # Coin Change as a 2D DP
 2 # https://www.geeksforgeeks.org/coin-change-dp-7/
 3 # COMP321-Lecture5-DP Solution Idea #1:
 4 def count(S, m, n):
 5   if (n == 0):
 6     return 1
 7   if (n < 0):
 8     return 0
 9   if (m <=0 and n >= 1):
10     return 0
11   return count(S, m - 1, n) + count(S, m, n - S[m - 1])
12
13 # Top-Down DP
14 # COMP321-Lecture5-DP Solution Idea #2:
15 table = [0]
16 def topDownDP(numItems, itemCosts, numOrders, orderPrices):
17   for i in range(max(orderPrices) + max(itemCosts)):
18     table.append(-1)
19   for i in range(numItems):
20     for j in range(max(orderPrices) + 1):
21       if table[j] == -2:
22         table[j + itemCosts[i]] = -2
23       if table[j] >= 0:
24         if table[j + itemCosts[i]] == -1:
25           table[j + itemCosts[i]] = i
26         else:
```

```
          table[j + itemCosts[i]] = -2

numItems = int(input())
itemCosts = list(map(int, input().split(" ")))
numOrders = int(input())
orderPrices = list(map(int, input().split(" ")))

topDownDP(numItems, itemCosts, numOrders, orderPrices)

for total in orderPrices:
  if(table[total] == -1):
    print("Impossible")
  elif(table[total] == -2):
    print("Ambiguous")
  else:
    order = []
    while total > 0:
      order.append(table[total] + 1)
      total = total - itemCosts[table[total]]
    if total < 0:
      print("Ambiguous")
    else:
      print(*sorted(order), sep = ' ')
```