```
import collections
class trieNode(object):
    def __init_ (self):
        self.children = collections.defaultdict(trieNode)
        self.end = False
class numberprefix(object):
    def __init__(self):
        self.root = trieNode()
    def addnumber(self,number):
        node = self.root
        for i in range(len(number)):
             node = node.children[number[i]]
        node.end = True
    def search(self, number):
        res = ""
        node = self.root
        for i in range(len(number)):
             if number[i] not in node.children:
                 if node.end is True:
                     return res
             else:
                 res += str(number[i])
                 node = node.children[number[i]]
         return res
def checkprefix(prefix, numbers):
    prefixtree = numberprefix()
    for i in prefix:
        prefixtree.addnumber(i)
    res = []
    for i in numbers:
        temp = prefixtree.search(i)
        res.append(temp)
    return res
```

第三题的意思是:

给定超长一段话

sdfgh fds fsdfds fsd fuds fjsdf kdfja fklafkl ad;ldkosa af dsf ksd d, fsdf, sdfdsfsdfsd.f s fs dsf fdsaiunvcskdcmsidcewcu, fdsiufjsdifkdjsfjisdfaos. fsdfdgfgsf......

希望你根据给定的长度,切割这段话

如果每一行的长度限制为15,那第一行会是

sdfgh fds(1/xx)

第二行会是

空格fsdfds (2/xx)

注意第二行开头的空格,因为第一行最后塞不下,但必须preserve这个空格,所以加在第二行头上。(打成空格因为地里和hackerrank一样会trim leading space) 第三行会是

fsd fuds (3/xx)

corner case比较多,但是比原题简单太多了。

```
while end >= start and message[end] != " " and message[end + 1] != " ":
                                                                                                                                                                                                                                                  while end >= start and message[end] != " " and message[end + 1] != " ":
                                                                                                                                                                                                                                                                                                                                                                        res[i] += "(" + str(i + 1) + "/" + str(row) + ")"
                                                                                                                                                                    res.append(message[start:end + 1])
                                                                                                                                                                                                                                                                               res.append(message[start:end + 1])
                                                                                                                                                                                                                                                                                                                                  res.append(message[start:end + 1])
                                                                                                                           if message[end] != " ":
                                                                                                                                                                                                                                       if message[end] != " ":
                                         row, start, end = 0, 0, 154
                                                                     res.append(message[:])
                                                                                               while end < len(message):</pre>
                                                                                                                                                                                              end = start + 154
                                                                                                                                                                                                                                                                                                         end = start + 159
                                                                                                                                                       end -= 1
                                                       if len(message) <= 160:
                                                                                                                                                                                                                                                                   end -= 1
                                                                                                                                                                                  start = end + 1
                                                                                                                                                                                                                                                                                            start = end + 1
             # Write your code here
                                                                                                                                                                                                                                                                                                                                                           for i in range(row):
def segments(message):
                                                                                                                                                                                                              row += 1
                                                                                                                                                                                                                                                                                                                        row += 1
                                                                                                              if row <=5:
                                                                                    return res
                                                                                                                                                                                                                                                                                                                                                                                     return res
                             res = []
                                                                                                                                                                                                                                                                                                                                                row += 1
```

Test against custom input

