def f(strs):

if not strs:

return ''

if len(strs)==1:

return strs[0]

strs.sort(key=len)

smallest\_word = strs[0]

index = len(smallest\_word)

while True:

longest\_found = False

longest\_prefix = smallest\_word[:index]

for word in strs[1:]:

if longest\_prefix in word[:index]:

longest\_found = True

else:

longest\_found = False

break

if longest\_found:

return longest\_prefix

index -= 1

def longestCommonPrefix(strs):

if len(strs) == 0:

return ""

if len(strs) == 1:

return strs[0]

# set prefix as the first element in the list

prefix = strs[0]

prefix\_length = len(prefix)

# iterate and modify the prefix as per the element in the list

for i in strs[1:]:

while prefix!=i[0:prefix\_length]:

prefix = prefix[0:prefix\_length-1]

prefix\_length = prefix\_length-1

if len(prefix) == 0:

return ""

return prefix

def f(strs):

if not strs:

return ''

if len(strs)==1:

return strs[0]

first = len(strs[0])

while 0 < first:

if all([strs[0][0:first]==i[0:first] for i in strs[1:]]):

return strs[0][0:first]

else:

first-=1