Longest Common Prefix

Write a function to find the longest common prefix string amongst an array of strings.

操，妈的想了好半天才想明白题目问的是什么：
意思是求所有字符串数组中字符串的最长公共前缀，也就是说每个字符串都包含这这个前缀。例如

str = ["abcdef", "abcke", "abcdk", "ab"]

把么"ab"就是最长的公共前缀。其实就是substring，只不过这个substring只能从第一个字符开始取。
code (Python):

```python
11  def longestCommonPrefix(strs):
12      if not str or len(str) == 0:
13          return "
14
15      prefix = strs[0]
16
17      for i in range(1, len(strs)):
18          j=0
19          while j < min(len(strs[i]), len(prefix)):
20              if strs[i][j] != prefix[j]:
21                  break
22              j += 1
23          prefix = prefix[: j]
24
25      return prefix
```

Analysis:

start from the first string in the array, assume that it is the longest common prefix

prefix = str[0]= "abcdef"

next, we loop through the array of strings, analyse every string in the array except the prefix (storing the first string).
compare this string with the first string, found out the first character in this string that does not match that in the prefix, example,

prefix = str[0] = "abcdef"

looping through the array and it it at

str[1] = "abcke"

compare them we can find out the first un-match character is at the 4th character 'k' of the str[2]. Now that we find the first un-match character, we update the prefix to be the matched substring, in this case

prefix = abc

then we repeat this procedure for str[1], str[2], and str[3] and update the prefix every time, final the prefix will store the longest common prefix