BIS 420 PROGRAMMING FOR DATA SCIENCE

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CHAPTER 9 EXERCISE 9.7
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This question is based on a Puzzler that was broadcast on the radio program Car Talk (http: // www. cartalk. com/ content/ puzzlers):

Give me a word with three consecutive double letters. I'll give you a couple of words that almost qualify, but don't. For example, the word committee, c-o-m-m-i-t-t-e-e. It would be great except for the 'i' that sneaks in there. Or Mississippi: M-i-s-s-i-s-s-i-p-p-i. If you could take out those i's it would work. But there is a word that has three consecutive pairs of letters and to the best of my knowledge this may be the only word. Of course there are probably 500 more but I can only think of one. What is the word?

```
def consecutivedl(word):
    count = 0
    i = 0
    while i < len(word) - 1:
        if word[i] == word[i + 1]:
            count += 1
            i += 2
        else:
            count = 0
            i += 1
        if count == 3:
```

```
            return True
    return False


def find(word_list):
    for word in word_list:
        if consecutivedl(word):
            return word
    return None

# Example word list
word_list = ["committee", "Mississippi", "bookkeeper", "bookkeeping"]

result = find(word_list)
print(f"The word with three consecutive double letters is: {result}")
```