

Detect Capital

Question:

<https://leetcode.com/problems/detect-capital/>

We define the usage of capitals in a word to be right when one of the following cases holds:

- All letters in this word are capitals, like "USA".
- All letters in this word are not capitals, like "leetcode".
- Only the first letter in this word is capital, like "Google".

Given a string `word`, return `true` if the usage of capitals in it is right.

Example 1:

```
Input: word = "USA"  
Output: true
```

Approach 1:

My approach was to check the first letter and if it is capital.

- If not Capital
 - a. All the other letters need to be small.
- If Capital
 - a. Check the case of the second letter.
 - If Small, all other characters need to be small
 - Else all characters need to be capital

Solution 1:

```
class Solution:  
    def detectCapitalUse(self, word: str) -> bool:  
        if len(word)<=1:
```

```

        return True
    if ord(word[0]) - ord('a') < 0:
        d=1
    else:
        d=0

    if d==0:
        for i in range(1, len(word)):
            if ord(word[i]) - ord('a') < 0:
                return False
    else:
        if ord(word[1]) - ord('a') >= 0:
            for i in range(2, len(word)):
                if ord(word[i]) - ord('a') < 0:
                    return False
        else:
            for i in range(2, len(word)):
                if ord(word[i]) - ord('a') >= 0:
                    return False
    return True

```

Approach 2:

Single all the cases in the above approach were revolving around the Capital Letters, I just figured that counting the number of Capital letters and checking the following conditions is fine:

1. If number of capital letters = length of word
2. If number of capital letters = 0
3. If number of capital letters == 1 and this capital letter is the first letter

Solution 2:

```

class Solution:
    def detectCapitalUse(self, word: str) -> bool:
        d="A"<=word[0]<="Z"
        c=0
        for i in word:
            c+=("A"<=i<="Z")
        if c==len(word) or c==0 or (c==1 and d==1):
            return True
        else:
            return False

```

The lines `"A"<=word[0]<="Z"` , `("A"<=i<="Z")` will return 1 if True otherwise 0.