In [ ]:
```
### wap - for a given string ,remove all consecutive duplicate characters
- input='aaa'
- output='a'
- input='aabbcc'
- output='abc'
```

In [7]:
```
def duplicates(s):

    result = [s[0]]
    for char in s[1:]:
        if char != result[-1]:
            result.append(char)
    return ''.join(result)

print(duplicates('aaa'))
print(duplicates('aabbcc'))
print(duplicates('abcd'))
print(duplicates('aabbccaa'))
print(duplicates('aaabbbccc'))

```

```
a
abc
abcd
abca
abc
```

In [42]:
```
inp='aabbcc'
out=[]
for ch in inp:
    if len(out)==0 or out[-1]!=ch:
        out.append(ch)
''.join(out)
```

Out[42]: 'abc'

In [43]:
```
def remove_consecutive_duplicates(s):
    result = ""
    for char in s:
        if not result or char != result[-1]:
            result += char
    return result
print(remove_consecutive_duplicates('aabbccaa'))

```

```
abca
```

there is only one five digit number n such that every one of following ten number share exactly one digit in common in the same position as n.find that number

In [44]:
```
inp=['01265','12171','23257','34548','45970','56236','67324','78084','89872','99414

```

In [45]:
```
for n in range(10000, 100000):
    s = str(n)
    if all(sum(1 for i in range(5) if s[i] == m[i]) == 1 for m in inp):
        print(n)
        break
```

```
30274
```

given a list of scores by student by students retrun average score of each student five score in order . each entry item[i] has item[i][0] the student id,item[1][1] the student score. find avg score follows

- input=[[1,91],[1,92],[2,93],[2,97],[1,60],[2,77],[1,65],[1,87],[1,100],[2,100],[2,76]]
- out=[[1,87],[2,88]] the avg score of std 1 is 87 the avg score of std 2 is88.6 , but with int division

In [46]:
```
inp=[[1,91],[1,92],[2,93],[2,97],[1,60],[2,77],[1,65],[1,87],[1,100],[2,100],[2,76]
```

In [47]:
```
s=dict(inp)
```

In [48]:
```
s
```

Out[48]:
```
{1: 100, 2: 76}
```

given a string that consists of only 0,1,2s. count the number of substring that have eqaul number of 0s,1s and 2s

- in=102100211
- output=102,021,210021,021 to total substring are 5

In [49]:
```
inp=102100211
```

In [ ]:
```

```