

ASCII Art Encoding

Write a function "encodeString" that will encode a string like 'AAAAABBBBAAA' as a list of tuples: [('A', 5), ('B', 4), ('A', 3)] meaning that the string has "5 A's, followed by 4 B's, followed by 3 A's"

Then use that function to compress a string containing "ASCII Art"

(https://en.wikipedia.org/wiki/ASCII_art (https://en.wikipedia.org/wiki/ASCII_art))

Write a corresponding function "decodeString" that will take in a list of tuples and print the original string.

```
In [1]: def encodeString(stringVal):
        encodedList = []
        prevChar = stringVal[0]
        count = 0
        for char in stringVal:
            if prevChar != char:
                encodedList.append((prevChar, count))
                count = 0
            prevChar = char
            count = count + 1

        encodedList.append((prevChar, count))
        return encodedList

def decodeString(encodedList):
    decodedStr = ''
    for item in encodedList:
        decodedStr = decodedStr + item[0] * item[1]
    return decodedStr
```

```
In [2]: # Test encodeString function
        encodeString('AAAAABBBBCCC')
```

```
Out[2]: [('A', 5), ('B', 4), ('C', 3)]
```

```
In [3]: # Test decodeString function
        decodeString([('A', 5), ('B', 4), ('C', 3)])
```

```
Out[3]: 'AAAAABBBBCCC'
```

```
encodedString = encodeString(art)
```

```
In [6]: print(decodeString(encodedString))
```



```
In [ ]:
```