LeetCode Bootcamp Week 4 Submission
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Question1: Implement Queue using Stacks

Code:

```python
class MyQueue(object):

    def __init__(self):
        self.stack_in = []
        self.stack_out = []

    def push(self, x):
        self.stack_in.append(x)

    def pop(self):
        self._transfer_if_needed()
        return self.stack_out.pop()

    def peek(self):
        self._transfer_if_needed()
        return self.stack_out[-1]

    def empty(self):
        return not self.stack_in and not self.stack_out

    def _transfer_if_needed(self):
        if not self.stack_out:
            while self.stack_in:
                self.stack_out.append(self.stack_in.pop())
```

Question2: Decode String

Code:

```python
class Solution(object):
    def decodeString(self, s):
        stack = []
        current_str = ''
        current_num = 0

        for char in s:
            if char.isdigit():
                current_num = current_num * 10 + int(char)
            elif char == '[':
                stack.append((current_str, current_num))
                current_str = ''
                current_num = 0
            elif char == ']':
                prev_str, repeat_count = stack.pop()
                current_str = prev_str + current_str * repeat_count
            else:
                current_str += char

        return current_str
```

Question3: Number of People Aware of a Secret

Code:

```python
class Solution(object):
    def peopleAwareOfSecret(self, n, delay, forget):
        MOD = 10**9 + 7
        dp = [0] * (n + 1)
        dp[1] = 1

        for day in range(1, n + 1):
            for share_day in range(day + delay, min(day + forget, n + 1)):
                dp[share_day] = (dp[share_day] + dp[day]) % MOD

        result = 0
        for day in range(n - forget + 1, n + 1):
            result = (result + dp[day]) % MOD

        return result
```