

LeetCode Bootcamp Week 2 Submission
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Question1: String to Integer (atoi)

Code:

```
class Solution(object):
    def myAtoi(self, s):

        MAX_INT = 2**31 - 1
        MIN_INT = -2**31

        i = 0
        n = len(s)
        result = 0
        sign = 1

        while i < n and s[i] == ' ':
            i += 1

        if i == n:
            return 0

        if s[i] == '+' or s[i] == '-':
            sign = -1 if s[i] == '-' else 1
            i += 1

        while i < n and s[i].isdigit():
            digit = int(s[i])

            if (result > MAX_INT // 10) or (result == MAX_INT // 10 and digit > 7):
                return MAX_INT if sign == 1 else MIN_INT

            result = result * 10 + digit
            i += 1

        return sign * result
```

Question2: Find All Anagrams in a String

Code:

```
class Solution(object):
    def findAnagrams(self, s, p):

        if len(s) < len(p):
            return []

        result = []
        p_len = len(p)

        count = {}
        for char in p:
            count[char] = count.get(char, 0) + 1

        required = len(count)
        matched = 0

        left = 0
        for right in range(len(s)):
            if s[right] in count:
                count[s[right]] -= 1
                if count[s[right]] == 0:
                    matched += 1

            if right >= p_len:
                if s[left] in count:
                    if count[s[left]] == 0:
                        matched -= 1
                    count[s[left]] += 1
                left += 1

            if matched == required:
                result.append(left)

        return result
```

Question3: Reverse Words in a String

Code:

```
class Solution(object):
    def reverseWords(self, s):

        left, right = 0, len(s) - 1
        while left <= right and s[left] == ' ':
            left += 1
        while right >= left and s[right] == ' ':
            right -= 1

        word, words = [], []
        while left <= right:
            if s[left] != ' ':
                word.append(s[left])
            elif word:
                words.append("".join(word))
                word = []

            left += 1

        if word:
            words.append("".join(word))

        return ''.join(words[::-1])
```