Extract the domain from an email address.

```python
def extract_domain(email):
    domain = ''
    for i in range(len(email)):
        if email[i]== '@':
            domain = email[i+1:]
            break
    return domain
extract_domain('user@nikesh.com')
```

[61] ✓ 0.0s Python

```
'nikesh.com'
```

Find the length of the longest word in a sentence.

```python
def longest_word(text):
    words = text.split()
    max_length = 0

    for word in words:
        if len(word) > max_length:
            max_length = len(word)
    return max_length

longest_word('hi good morning')
```

[3] ✓ 0.0s Python

... 7

Capitalize the first letter of each word without using title().

```
def title(text):
    return ' '.join(char[0].upper()+char[1:] for char in text.split())

title('nikesh singh')
```

[66] ✓ 0.0s Python

```
'Nikesh Singh'
```

Remove specific characters from a string.

```
def remove_char_from_words(text,word_to_remove):
    result = ''
    for char in text:
        if char not in word_to_remove:
            result += char
    return result

remove_char_from_words('nikesh singh','n')
```

[67] ✓ 0.0s Python

```
'ikesh sigh'
```

Count the number of spaces in a string.

```python
def count_space(text):
    space = 0
    for i in text:
        if i == ' ':
            space +=1
    return space

count_space('hello good morning')
```

[4] ✓ 0.0s Python

... 2

Convert all consonants to uppercase.

```python
def convert_consonants_upper(text):
    result = ''

    for char in text:
        if char.lower() not in 'aeiou':
            result += char.upper()
        else:
            result += char
    return result

convert_consonants_upper('hello good morning')
```

✓ 0.0s Python

```
'HeLLo GooD MoRNiNG'
```

Insert dashes between each character in a string.

```python
def dashes_between_each_char(text):
    result = ''
    for i in range(len(text)):
        result += text[i]
        if i != len(text) -1:
            result += '-'
    return result
dashes_between_each_char('Nikesh')
```

✓ 0.0s Python

```
'N-i-k-e-s-h'
```

Find the longest substring without repeating characters.

```python
def long_sub_without_repeat(text):
    longest =''
    current = ''

    for char in text:
        if char not in current:
            current += char
        else:
            if len(current) > len(longest):
                longest = current
            current = char
    if len(current) > len(longest):
        longest = current
    return longest

long_sub_without_repeat('abcabcbb')
```

✓ 0.0s Python

'abc'

Check if a string contains only ASCII characters.

```python
def check_ascii(text):
    is_ascii = True
    for char in text:
        if ord(char) > 127:
            is_ascii =False
            break
    return is_ascii

check_ascii('Hello Nikesh')

# alternative way-----------------------------

def check_ascii(text):
    return all(ord(char) < 127 for char in text)
check_ascii('Hello Nikesh')
```

✓ 0.0s Python

```
True
```

Reverse words in a string.

```python
def reverse_words(text):
    words = text.split()
    result = ''

    for i in range(len(words)-1,-1,-1):
        result +=words[i] + ' '
    return result
reverse_words('nikesh singh ')

# alternative way------------------------

def reverse_words(text):
    return ' '.join(text.split()[::-1])

reverse_words('singh nikesh')
```

✓ 0.0s Python

```
'nikesh singh'
```

Count the number of words in a string.

```python
def count_number_words(text):
    count = 0
    for word in text.split():
        count +=1
    return count

count_number_words('Hello Nikesh how are you')

# smart way to get the same output------------

def count_number_words(text):
    return len(text.split())

count_number_words('Hello Nikesh')
```

✓ 0.0s Python

```
2
```

Find the longest repeating character sequence.

```python
def long_rept_char_sequence(text):
    max_count = 0
    current_count = 1

    for i in range(1,len(text)):
        if text[i] == text[i-1]:
            current_count +=1
        else:
            if current_count > max_count:
                max_count = current_count
            current_count = 1

    if current_count > max_count:
        max_count = current_count
    return max_count

long_rept_char_sequence('aaabbccccddddddeeee')
```

✓ 0.0s Python

6

Remove all punctuation from a string.

```python
def remove_punc(text):
    result =''
    for char in text:
        if char.isalnum() or char == ' ':
            result += char
    return result
remove_punc("Hello, Nikesh!")

# smart way to get the same output------------

def remove_punc(text):
    return ''.join(char for char in text if char.isalnum() or char ==' ')
remove_punc("Hello, Nikesh!")
```

✓ 0.0s Python

```
'Hello Nikesh'
```

Count the occurrences of each word in a string.

```python
def count_words(text):
    word_count ={}
    words = text.split()

    for word in words:
        if word in word_count:
            word_count[word]  += 1
        else:
            word_count[word] =1
    return word_count

count_words("this is a test this is only a test")

# smart way to get the same output------------
def count_words(text):
    return {word: text.split().count(word) for word in set(text.split())}

count_words("this is a test this is only a test")
```

✓ 0.0s Python

```
{'test': 2, 'this': 2, 'is': 2, 'a': 2, 'only': 1}
```

Remove duplicate words from a string.

```python
def remove_duplicate(text):
    word = text.split()
    result = []
    seen = set()

    for i in word:
        if i not in seen:
            result.append(i)
            seen.add(i)
    return ' '.join(result)

remove_duplicate('hello nikesh hello nikesh')

# smart way to get the same output------------

def remove_duplicate(text):
    return ' '.join(dict.fromkeys(text.split()))
remove_duplicate('hello nikesh hello nikesh')
```

✓ 0.0s Python

```
'hello nikesh'
```

Reverse each word in a string.

```python
def reverse_each_words(text):
    result = ''
    words = text.split()
    for word in words:
        result += word[::-1] + ' '
    return result

# smart way to get the same output------------

def reverse_each_words(text):
    return ' '.join(word[::-1] for word in text.split())

reverse_each_words('Nikesh kumar singh')
```

✓ 0.0s Python

```
'hsekiN ramuk hgnis'
```

Check if a string is a palindrome (ignoring spaces).

```python
def check_palindrome(text):
    clean = ''
    for char in text:
        if char.isalnum():
            clean +=char.lower()
    return clean == clean[::-1]
check_palindrome("madam in eden im adam")
```

✓ 0.0s Python

```
True
```

Convert lowercase vowels to uppercase.

```python
def lower_case_vowels_to_upper(text):
    words = text
    result = ''
    for char in words:
        if char in 'aeiou':
            result += char.upper()
        else:
            result += char
    return result

lower_case_vowels_to_upper('nikesh singh')

# smart way to get the same output------------

def lower_case_vowels_to_upper(text):
    return ''.join(char.upper() if char in 'aeiou' else char for char in text)

lower_case_vowels_to_upper('nikesh singh')
```

✓ 0.0s Python

```
'nIkEsh sIngh'
```

Find the first non-repeating character in a string.

```python
def non_rept_char(text):
    result = None

    for char in text:
        if text.count(char) ==1:
            return char
    return None

non_rept_char('swiws')
```

✓ 0.0s Python

```
'i'
```

Calculate the frequency of vowels in a string.

```python
def count_vowels(text):
    return {char: text.count(char) for char in text if char.lower() in 'aeiou' }

count_vowels('Nikesh singh')
```

✓ 0.0s Python

```
{'i': 2, 'e': 1}
```