

Count Words

str = "Welcome_to_geekster"

str = "This_is_a_sentence"

↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑

c = 0

↑

no. of words

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    String str = scn.nextLine();
    int count = 0;
    for (int i = 0; i < str.length() - 1; i++) {
        char ch = str.charAt(i);
        char ch1 = str.charAt(i + 1);
        if (ch == ' ' && ch1 != ' ') {
            count++;
        }
    }
    count++;
    System.out.println(count);
}
```

Approach:- only when there are no spaces in start or end of sent.

str = "This is a sentence"

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Diagram showing indices 0 to 14 for the string "This is a sentence". The character 'a' at index 8 is circled, and the character 'e' at index 12 is circled. Arrows indicate the movement of the pointer 'i' from index 0 to index 12.

```
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    String str = scn.nextLine();
    int count = 0;
    for (int i = 0; i < str.length() - 1; i++) {
        char ch = str.charAt(i);
        char ch1 = str.charAt(i + 1);
        if (ch == ' ' && ch1 != ' ') {
            count++;
        }
    }
    count++;
    System.out.println(count);
}
```

C = 0 1 2 3

ch ch1

i=0 T, h

i=1, h, i

i=2, i, s

i=3, s, ' '

✓ i=4, ' ', i

i=5, i, s

i=6, s, ' '

✓ i=7, ' ', a

i=8, a, ' '

i=9, ' ', ' '

i=10, ' ', ' '

i=11, ' ', s

✓ i=12, s

Inbuilt function

str = "Welcome_to_geekster"

1) str. split(' ');

create one array divided by space

arr

Welcome	to	geekster
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2) str. split('e'); →

W	lcom	_to_g	"	kst	r
---	------	-------	---	-----	---

Find Unique

str = "100234"
6 1 2 3 4 5

over

T	T	T	T	T	F	F	F	F	F
0	1	2	3	4	5	6	7	8	9

(boolean)

'0' → 27

'1' → 28

'2' → 29

'3' → 30

'

'

'

'

'

'g' → 37

i = 0, ch = '1'
int index = '1' - '0' = 1
28 - 27

i = 1, ch = '0'
index = '0' - '0' = 0

i = 2, ch = '0'
index = '0' - '0' = 0

i = 3, ch = '2'
index = '2' - '0' = 2

i = 4, ch = '3'
index = '3' - '0' = 3

i = 5, ch = '4'
index = '4' - '0' = 4

```

public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    String str = scn.nextLine();
    System.out.println(countUnique(str));
}

```

```

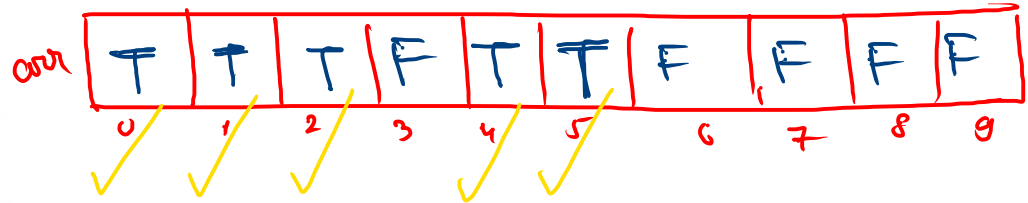
public static int countUnique(String str) {
    → boolean[] arr = new boolean[10];
    for (int i = 0; i < str.length(); i++) {
        char ch = str.charAt(i);
        int idx = ch - '0';
        arr[idx] = true;
    }

    int count = 0;
    for (int i = 0; i < 10; i++) {
        if (arr[i] == true) {
            count++;
        }
    }
    return (count);
}

```

str = "5401152";

0 1 2 3 4 5 6



i=0, ch='5'
idx = '5' - '0' = 5

i=1, ch='4'
idx = '4' - '0' = 4

i=2, ch='0'
idx = '0' - '0' = 0

i=3, ch='1'
idx = '1' - '0' = 1

i=4, ch='1'
idx = '1' - '0' = 1

i=5, ch='5'
idx = '5' - '0' = 5

i=6, ch='2'
idx = '2' - '0' = 2

8

Is Palindrome

↳ 2 pointers

String str = "radar";
0 1 2 3 4
↑ ↑
si ei

$si = 0$

$ei = str.length() - 1$

si = starting index
ei = ending index

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    String str = scn.nextLine();  
    System.out.println(isPalindrome(str));  
}
```

```
public static String isPalindrome(String str) {  
    int si = 0;  
    int ei = str.length() - 1;  
    while (si <= ei) {  
        if (str.charAt(si) != str.charAt(ei)) {  
            return "Not a Palindrome";  
        }  
        si++;  
        ei--;  
    }  
    return "Palindrome";  
}
```