lastday

char
↓
number → ASCII
↓ ↓
binary American standard code for informtn interchange.

string → charAt(i), 0, 1, 2 - index based

Uppercase count

reverse.

Q1) Given a string. Return true if the string is palindrome else return false. (lowercase)

Palindrome :-

org == rev → Palindrome

madam → madam → True.

adam $\overset{==\times}{\longrightarrow}$ mada → false.

abeeba $\overset{==}{\longrightarrow}$ abeeba → True.

1) take reverse ← Done yesterday
2) Compare rev with original string
3) if (r == o) => return true
   ↳ original string
   else
   return false.

MOM $\overset{==}{\longrightarrow}$ MOM ✓

way1)

```
booleon isPalindrone (String str) {
    string rev = " ";
    // find revese
    ≡
    if ( rev == str) {
        return true
    }
    return false.
}
```

obj

obj

== ✗

always return false.

" == " ??

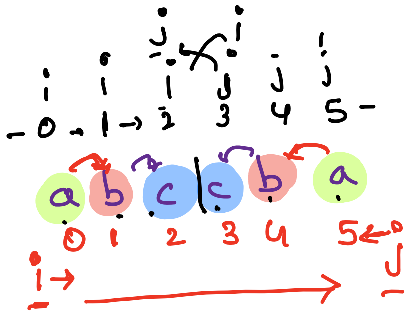
↳ String "str" is an object. when we use '==' comparing objects // address

Correct way

```
if ( rev.equals (str)) {
        return true;
    } else {
        return false;
    }
```

way2

even



n = length

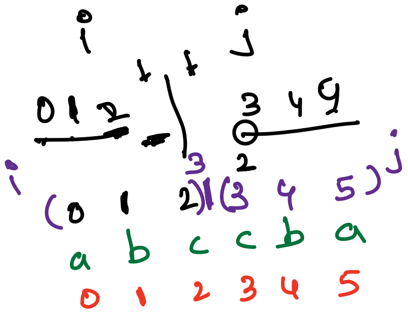
j = n-1

i = 0;

j = n-1;

i → 0 → n/2 → 3

j → 3 4 5



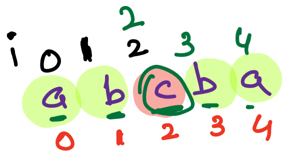
j = 2 i = 3

i < j

i < j

3 < 2 — false → stop

odd =>



(i < j)

2 < 2 → false

return false.

soln
2 ways

```
boolean isPalindrome ( String str) {
    int n = str.length();
    int i = 0;
    int j = n-1; // ? cuz index starts frm 0
     while (i < j) { // because midway
      char ch1 = str.charAt(i);
      char ch2 = str.charAt(j);
         if (ch1 != ch2) {
               return false;
         }
         i++;
         j--;
     }
     return true;
```

ascii
num

ascii
num

Note

two pointer techique

i → first left

j right/last

// doubt

```
if (ch1 == ch2) {
    return true;
}
```

a a

abcda

✗

!= → for string

!rev.equals(str)

Q2) Given a uppercase string, find the lower case version of the string and return it

str

"HELLO" → "hello"

" HI" → hi

" CODING" → coding

'a' - 'z' → 97 - 122

'A' - 'z' → 65 - 90.

'A' → 'a'

Easiest way

65 + 32 = 97

'B' 'b'

66 + 32 => 98

'A' and 'a' =>

My way

"ABC"

'A' → 'a'   ch =) ch - 'A' = 0

65 - 65

'B' → 'b'   ch =) ch - 'A' = 1

66 - 65

'c' → 'c'   ch =) ch - 'A' = 2

67 - 65

A → (ch - 'A') + 'a';

0 + 97 =) 97 → 'a'

B → (ch - 'A') + 'a'

1 + 97 =) 98 → 'b'

C → (ch - 'A') + 'a'

2 + 97 = 99 → 'c'

UpperCase to lower case

ch - 'A' + 'a'

lowercase to Uppercase

ch - 'a' + 'A'

ch - existing case + "tonewCase";

ch - 'A' + 'a';

ch - 'a' + 'A';

e l e p h a n t

Vowels → 3

Cont → 5.

Q → Given a lowercase string, find the total no of vowels and return it.

Vowels : 'a' , 'e' , 'i' , 'o' , 'u'

string ⇒ Vitthal → 2
shruti → 2
sudheer → 3
Sreenandan → 4

'a' <= 'b'
↓
Ascii   ascii.

```
int countVowels(String str) {
        int n= str.length(); int count=0;
        for(int i=0; i<n-1; i++){
              ch= str.charAt(i);
if ( ch=='a' || ch =='e' || ch=='i'
        || ch=='o' || ch=='u') {
              count++;
        }   }
return count;
}
```

((n - count)) → consonants

[vowels count, consonant count)

[count , n- count].

```
sopln(res[0]);
sopln(res[1]);
```

X THE ENDS X

Consistency is key

Intermediate → Amazon,

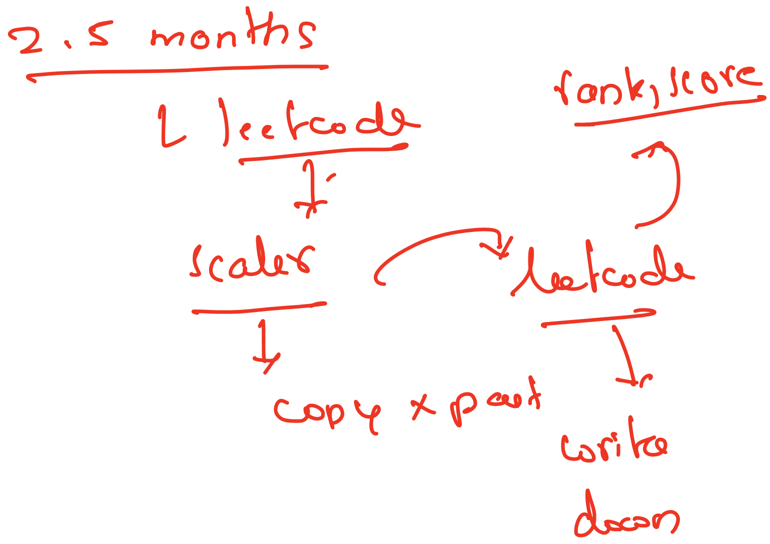
flipkart

Morgan Stanly

(Apple) ← [illegible]

Target

walmart



2.5 months

1 leetcode

scaler

leetcode

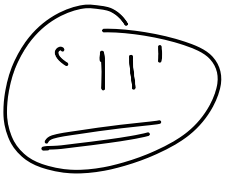
rank, score

copy x paste

write down

wrong date for test

- prithviraj
- ujwal



Happy Diwali

Goodbye for now

Doubt

```
string ans = "";
ch = str.charAt(0);
for(int i=1; i<n-1; i++)
        if(ch == str.charAt(i)){
                ans += '$';
        }else{
                ans += str.charAt(i);
        }
}
return ans;
```

✓

0 1 2 3 4 →

[2 1 0]
 0 1 2

→ index become value.

→ value become index

```
for(int i=0; i<n; i++){
    B[A[i]] = i;
} B[2] = 0;
```

i=0

[2 1 0]
0 1 2

[2 1 0]
~~0 1 2~~

B[A[0]]

```
for(int i=0; i<n; i++){
    int val= A[i];
    B[val] = i;
}
```

210
210

[1 2 0]
0 1 2

[1, 0]
0 1

[1, 0]
0 1

A= [2, 0, 1]
0 1 2

i	i<n	val	B[val] = i	i++
0	T	2	B[2] = 0	1
1	T	0	B[0] = 1	2
2	T	1	B[1] = 2	3
3 → come out loop.				

[0,1] →

0	T	1	B[1] = 0	1
1	t	0	B[0] = 1	2
2	f → Come out loop			

```
Ch= str.charAt(0);
res = "" + ch

 res => r

    for(i=1 ——— n)
            res+$at


        main h
           ≡
            h
              pub static solve
```

https://www.interviewbit.com/snippet/b200e7d28077a2ab9fa1/