

Agenda

- 1 Strings in Python
- 2 Numeric Representation of Strings: ASCII
- 3 String Formatting and Manipulation
- 4 String Methods
- 5 Palindrome
- 6 Mutability and Immutability

Strings in Python

1 A Sequence of Characters

* Ways to create string:

① " " ' '

② @ #

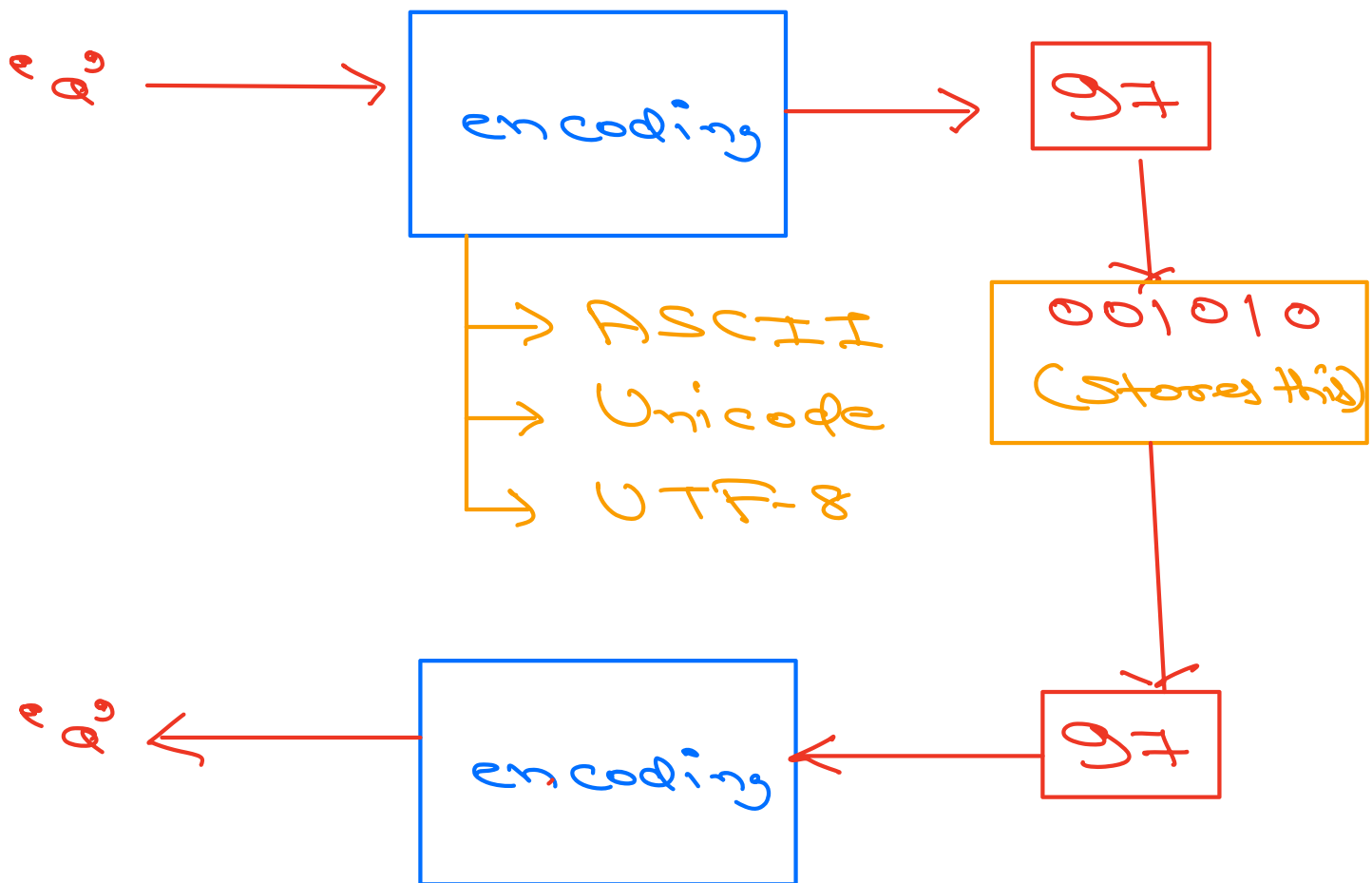
③ """ """ (Multiline String)
''' ''' or "" "" ""

Type Cast : str (Other DataType)

$Q = ' '$
↓
Variable ← String

Memory Representation of Strings

Computer Only Understand Binary $\rightarrow (0, 1)$



'a' : 97	97 : 'a'
'b' : 98	98 : 'b'
..	
..	
..	
..	
..	

11 lakh +
UTF-8

- 9 All str encoding algos are
Tables that map char to Num
and Vice-Versa

String Manipulation

- 9 $str1 + str2 \Rightarrow str1str2$
- 9 $str1 * 3 \rightarrow str1str1str1$
- 9 ① $str1 > str2 \rightarrow F \quad \checkmark$
- 9 ② $str1 > str2 \rightarrow T$
- ↓ ↓
- Lexicographical Order

String Formatting

- * String Formatting is used for combining Variable with String

Pending: Mutability
vs
Immutability

Mutables in Python

- ↳ List ✓
- ↳ Set
- ↳ Dictionary

}

Immutable

Everything
else

Str1 = abcdcba



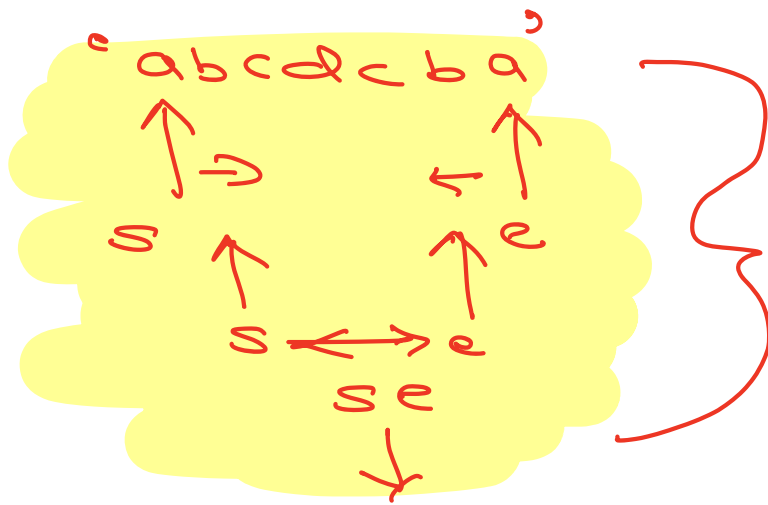
Str1[0:0-1]

(Copy: extra Space)



Str1 == Str1[0:0-1]

(Comparison will be char by char)



Two pointer approach

Q:3 Inverse Array

A = [2, 0, 1]

same-size

new-list = [0, 0, 0]

[1, 2, 0]

index of element → index()

new-list[element] = index of element