Mastering String Operations

Agenda:

- → String Operators
- → Slicing a String
- → String Formatting
- → String Methods

String Operators:

i) Concatenate Operator (+)

2 strings : 'a' + 'b' → 'ab' → 1 concatenate operator

3 strings : 'a' + 'b' + 'c' → 'abc' → 2 concatenate operator

n strings : 'a_1' + 'a_2' + ... + 'a_n' → '$a_1 a_2 \ldots a_n$' → n-1 concatenate operator.

'\141'

'a'

octal

141 → 97 → 'a'

$1 \times 8^0 = 1$

$4 \times 8^1 = 32$

$1 \times 8^2 = 64$

97

142 → 98 → 'b'

\000

\x65

65

$5 \times 16^0 = 5$

$6 \times 16^1 = 96$

$96 + 5 = 101 \rightarrow e$

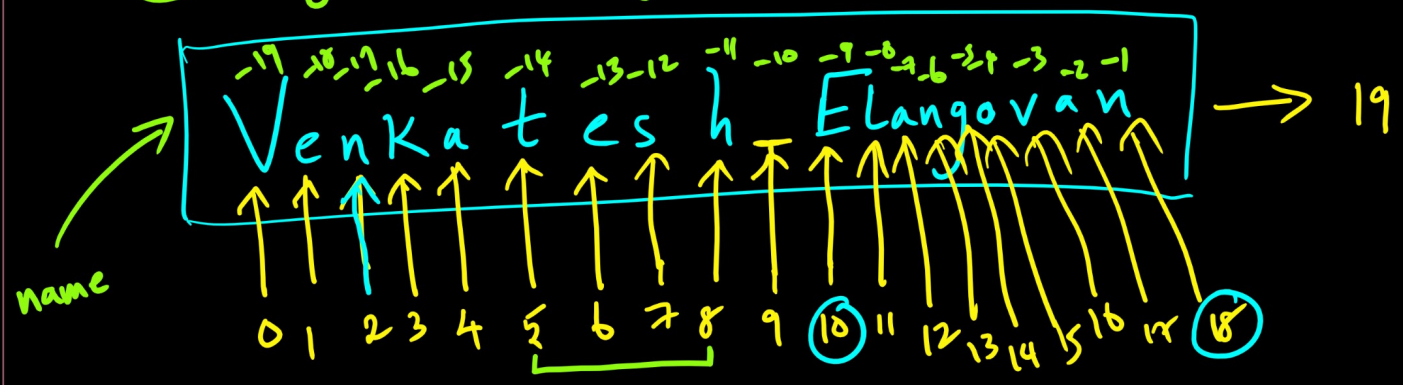
a → 97
b → 98
c → 99 d → 100 e

Print("Python class") — Python class

'C'
'Java'
'ML'

Print("%s class" % subject)

Slicing a String:



name[5] = t

name[5 : 8] → tes

name[5 : 9] → tesh

name [start : End]

start ↑ consider

End ↑ neglect

name [2 :]

→ end character index is not given

name [: 15]

↑ 0

name [startVal : endVal : stepValue]

stepValue ↑ by default stepValue = 1

10 11 12 13 14 15 16 17 18 : 2

Elangovan

Eagvn

Env

2 → 1 skip
3 → 2 skip.

1

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0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

name [15 : 10]

0

16, 17, 18

15, 10, 1 → " "

name[15 : 10 : -1]

Elangovan

10 11 12 13 14 15

ognal

[8 : 15] , [15 : 8]

8 to 14

15 to 9

Elangovan

10

18

nvga

name[18 : 10 : -2]

-18 -16 -14 -12 -10 -8 -6 -4 -2

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-19 -17 -15 -13 -11 -9 -7 -5 -3 -1

-19 -18 -17 -16 -15 -14 -13

name[-19 : -13]

Venkate

start

end index

-19 -13 step value : 1

name [-19 : -13 : -1] → " "

Venkate

↑ -19 ↑ -13

-1

-19 -20 -21

Q1: name [-13 : -19] →

Q2: name [-13 : -19 : -1] →

-13

-19

V e n k a t e

" "

Q1: 1

E -19

S -13

e t a k n e

name [: : -1] ← string reverse.

19

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↑ S

navognalE hsetakneV

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E ↑ ↑ S

n v g a E h e a n V

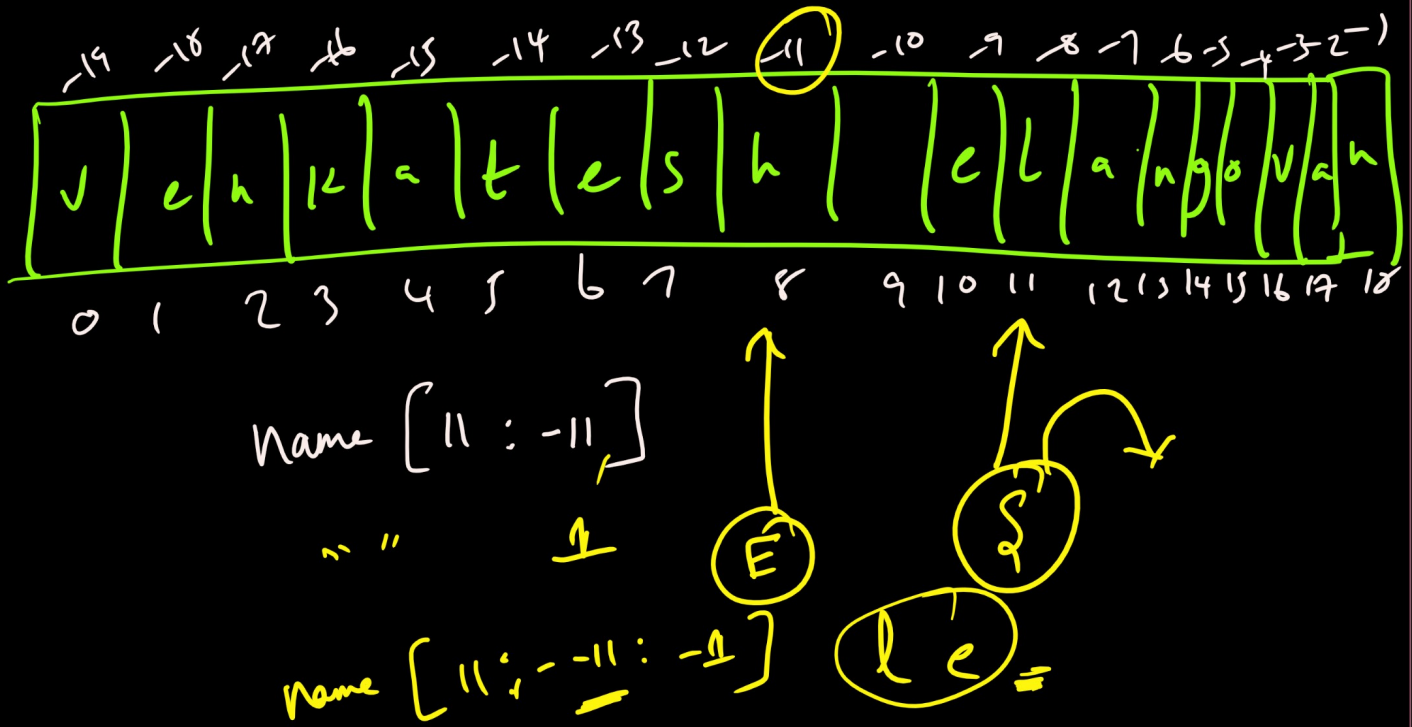
name [: : -1]

MADAM

A B C B A

ABCBA

ABCBA



Formatting the Strings:

print("My name is {} and I'm {} years old.".format( ))

"String".format(name, age)

0 → name, 1 → age