Full stack web development using python

str

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Agenda

1. str introduction
2. creating str object
3. indexing
4. accessing str elements
5. built-in methods
6. Concatenation and repetition
7. Comparison operator
8. str object methods
9. format
10. split and join
11. Slicing operator

str

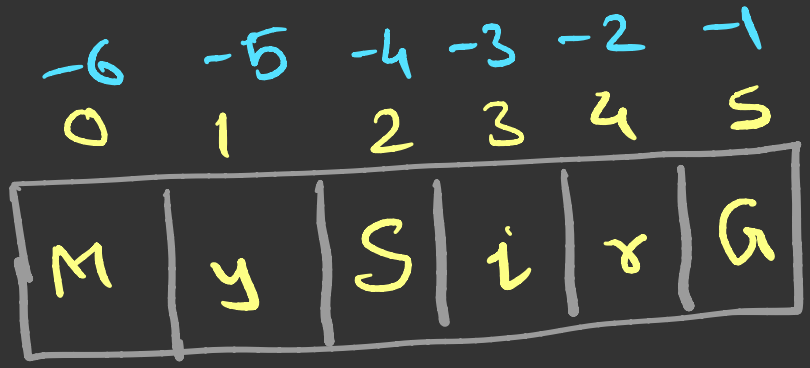
str is a class
str is immutable
str is iterable
str is hashable
str is a sequence

How to create str object?

```
S1 = "MySirG"
S2 = 'MySirG'
S3 = """MySirG"""
S4 = '''MySirG'''
S5 = str()
S6 = str(125)
S7 = str(3.45)
```

indexing

```
S1 = "MySixG"
```



Accessing str elements

1. s1[index]
2. print(s1)
3. for loop
4. slicing operator

built-in methods

len()

min()

max()

sum()

sorted()

Concatenation and Repetition Operator

S1 + S2

S1 = "ABC"
S2 = "DE"

S1 + S2
"ABCDE"

S1 * 3

S2 * 3 "DEDEDE"

Comparison Operator

S1 > S2 → True if S1 comes after S2 in dictionary order

Str object methods

index()
count()
startswith()
endswith()
split()
join()
format()
isdigit()
islower()
isupper()
lower()
upper()
replace()

format

string.format(var1, var2, ...)

```
print("{} , how are you?".format("Saurabh"))

print("{}, {}, {}".format("one", 25, 3.5))
print("{2}, {0}, {1}".format(10, 20, 30))
```

Split and join

s1 = 'Mysirg Educatin Services'

l1 = s1.split(' ') ⟶ returns list of str type elements

l1 = ['Mysirg', 'Educatin', 'Services']

---

s1 = "10,30,20,50,40"

l1 = s1.split(',') → ["10", "30", "20", "50", "40"]

l2 = [int(e) for e in l1]

[10,30,20,50,40]

Split ⟶ str ⟶ list of str base string

join ⟶ list of str ⟶ str base string

s1 = 'Mysirg Educatim Services'

base string = ' ' (space)

s1.split(' ') ⟶ ['Mysirg', 'Educatim', 'Servic

---

l1 = ['Mysirg', 'Educatim', 'Services']

base string = ' ' (space)

baseString.join(list of str)

' '.join(l1) → 'Mysirg Educatim Services'

Slicing Operator

strobject [beg : end : step]

```
  0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
S1="Mysirg Education Services"
```

beg = 1
end = 10
step = 2

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