

Strings

String is data type that stores a sequence of characters.

Basic Operations

- **concatenation**

"hello" + "world" \longrightarrow "helloworld"

- **length of str**

`len(str)`

Indexing

A p n a _ C o l l e g e

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

str = "Apna_College"

str[0] is 'A', str[1] is 'p' ...

str[0] = 'B' *#not allowed*

Slicing

Accessing parts of a string

`str[starting_idx : ending_idx]` #ending idx is not included

`str = "ApnaCollege"`

`str[1 : 4]` is "pna"

`str[: 4]` is same as `str[0 : 4]`

`str[1 :]` is same as `str[1 : len(str)]`

Slicing

Negative Index

A p p l e
-5 -4 -3 -2 -1

str = "Apple"

str[-3 : -1] is "pl"

String Functions

```
str = "I am a coder."
```

```
str.endsWith("er.") #returns true if string ends with substr
```

```
str.capitalize() #capitalizes 1st char
```

```
str.replace(old, new) #replaces all occurrences of old with new
```

```
str.find(word) #returns 1st index of 1st occurrence
```

```
str.count("am") #counts the occurrence of substr in string
```

Let's Practice

WAP to input user's first name & print its length.

WAP to find the occurrence of '\$' in a String.

Conditional Statements

if-elif-else (SYNTAX)

if(condition) :

Statement1

elif(condition):

Statement2

else:

StatementN

Conditional Statements

Grade students based on marks

marks \geq 90, grade = "A"

90 > marks \geq 80, grade = "B"

80 > marks \geq 70, grade = "C"

70 > marks, grade = "D"

Let's Practice

WAP to check if a number entered by the user is odd or even.

WAP to find the greatest of 3 numbers entered by the user.

WAP to check if a number is a multiple of 7 or not.