Strings

String is data type that stores a sequence of characters.

Basic Operations

- **concatenation**

Que-how can catenation is different from adding?

“hello” + “world” ⟶ “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
```

Que-should we need to write is end with?is it beacuse it is a verb?

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 >= 90, grade = “A”

90 > marks >= 80, grade = “B”

80 > marks >= 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.