

## Day1 task : String handling

### Python String

A string is a sequence of characters. Python treats anything inside quotes as a string. This includes letters, numbers, and symbols. Python has no character data type so single character is a string of length 1.

### Creating a String

Strings can be created using either **single** (') or **double** (") quotes.

### Multi-line Strings

If we need a string to span multiple lines then we can use **triple quotes** (""" or """).

### Accessing characters in Python String

Strings in Python are sequences of characters, so we can access individual characters using **indexing**. Strings are indexed starting from **0** and **-1** from end. This allows us to retrieve specific characters from the string.

### String Slicing

Slicing is a way to extract portion of a string by specifying the **start** and **end** indexes. The syntax for slicing is **string[start:end:step]**, where **start** starting index and **end** is stopping index (excluded).

### String Immutability

Strings in Python are immutable. This means that they cannot be changed after they are created. If we need to manipulate strings then we can use methods like concatenation, slicing, or formatting to create new strings based on the original.

### Deleting a String

It is not possible to delete individual characters from a string since strings are immutable. However, we can delete an entire string variable using the **del** keyword.

### Formatting the strings

We can format the strings using **f{}** and **.format()**

### Common string methods :

Len() , count() , upper(),lower(),startswith(), endswith(),replace(),strip().split()

### **Concatenating and Repeating Strings**

We can concatenate strings using + **operator** and repeat them using \* **operator**

### **Using *in* for String Membership Testing**

The **in** keyword checks if a particular substring is present in a string.