**Strings in python**

**A screenshot of a computer

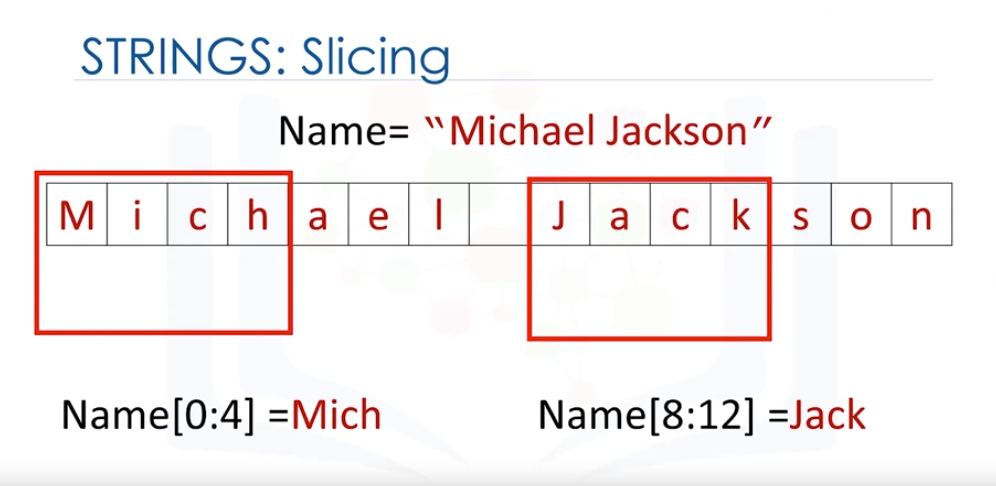
Description automatically generated**

Now the above pic is telling that there is index behind every character in strings.

A screenshot of a computer

Description automatically generated

We can also do negative indexing in strings , which means that if we start from **-1** so it represent the last character in string and so on …

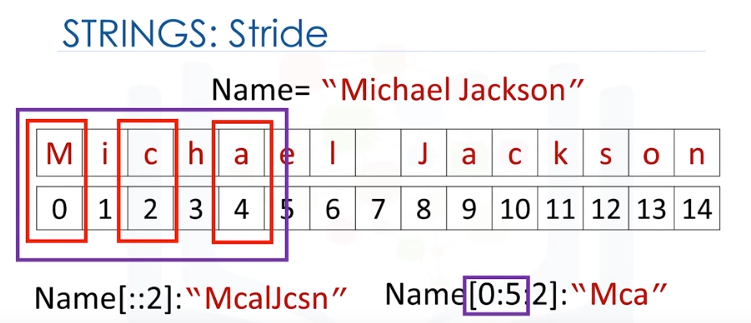


Now the above pic is telling that we can do slicing in string by putting stringName**[startPosition:endposition].** like in JS or TS we do it **stringName.slice(start:end).**

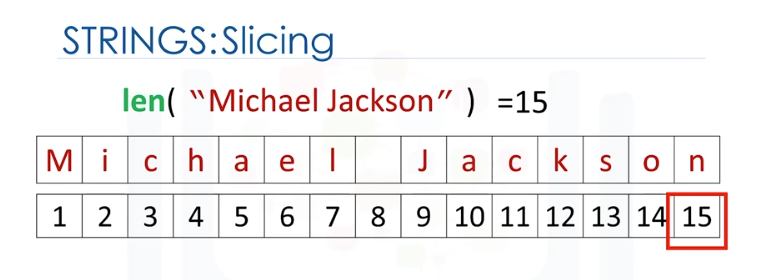


Now in above case we are skipping every 2 second value .It always start from the first value of string.

Name[::2] – Now ab yeh jo syntax hna yeh kiu kay I want to select complete string toh iss lia jo **starting** and **ending** position hai wo nhi input ki bs uski jaga **: (colon)** or last may skip value provide krdi.



Name[0:5:2] – Now in this statement we are first slicing string from index 0 to 5th position , then skipping the 2nd values.



A screenshot of a computer

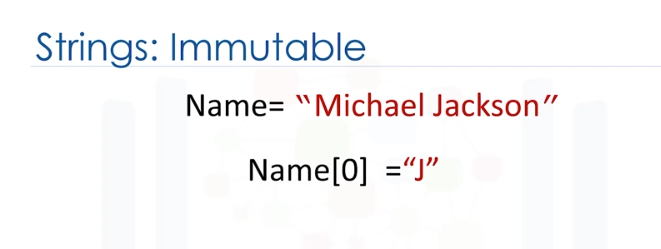
Description automatically generated

Above is concatenation.

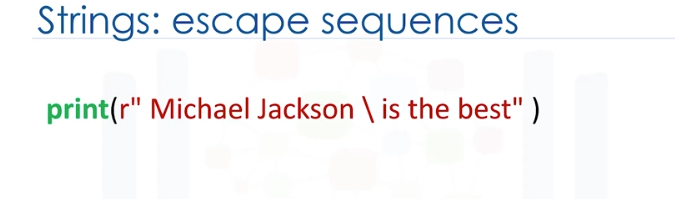
A screenshot of a computer

Description automatically generated

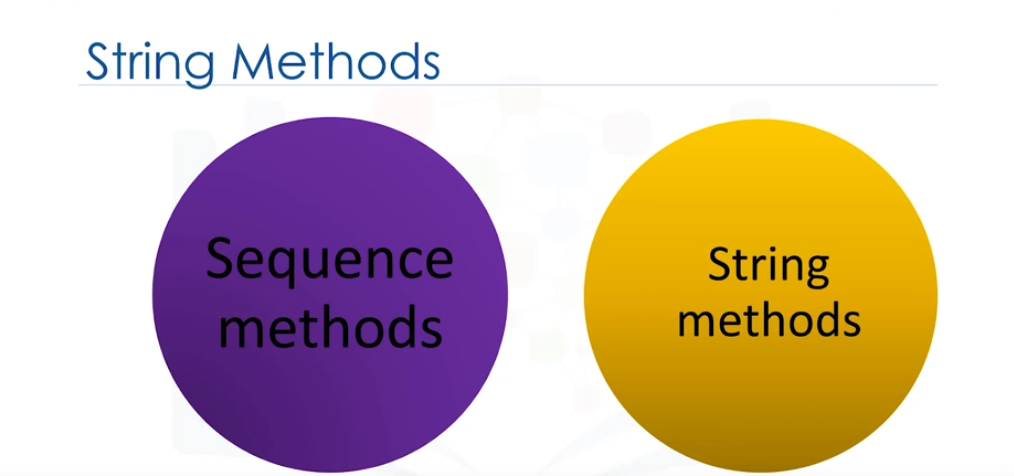
Now above pic is telling that we can assign a new value of string But cant change the actual string see in below pic:



Ab jo **Name[0] = “J”** it is not possible.



Now actually when you put backslash in string so python consider it as “escape sequence” so to solve this issue you put double backslash “//” or put **r** before starting string.

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**Sequence Methods**

These are methods that apply to all sequence types in Python, which include strings, lists, and tuples. Common sequence methods are:

* len(seq): Returns the length of the sequence.
* seq.index(x): Returns the first index of the value x.
* seq.count(x): Returns the count of how many times x appears in the sequence.

Since strings are sequences of characters, these methods can be used on strings as well. For example, you can use len("hello") to get the length of the string, which would be 5.

Now Sequence methods means wo method jo un sab type pa apply hojayega that have index corresponding to each character/elements.

**String Methods**

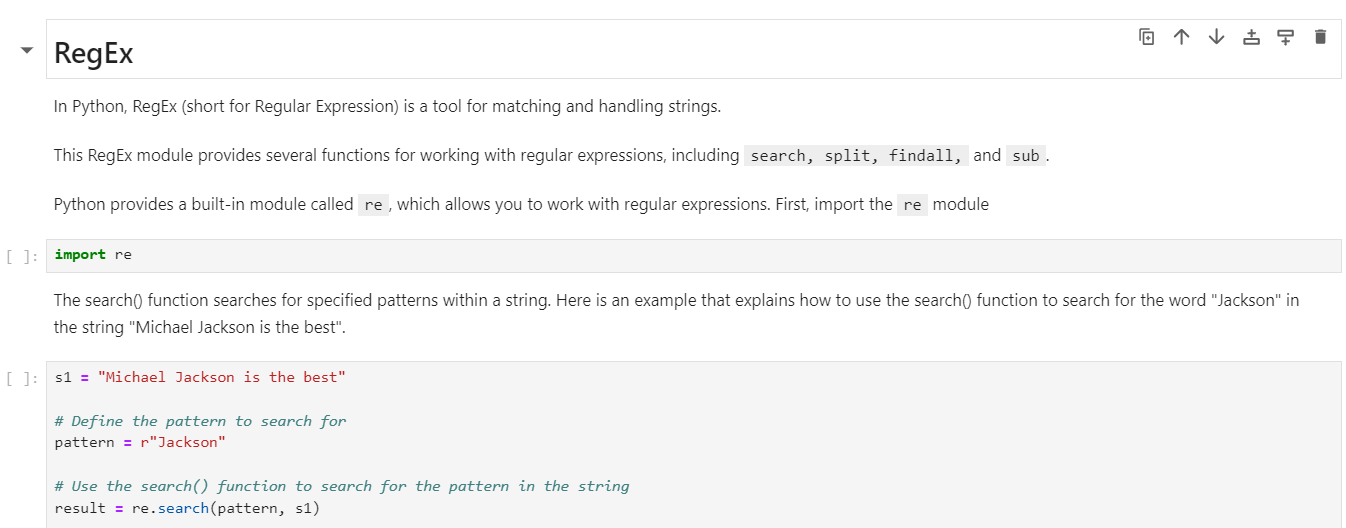
But string methods wo method hain jo mainly srf string type pa apply hoga.

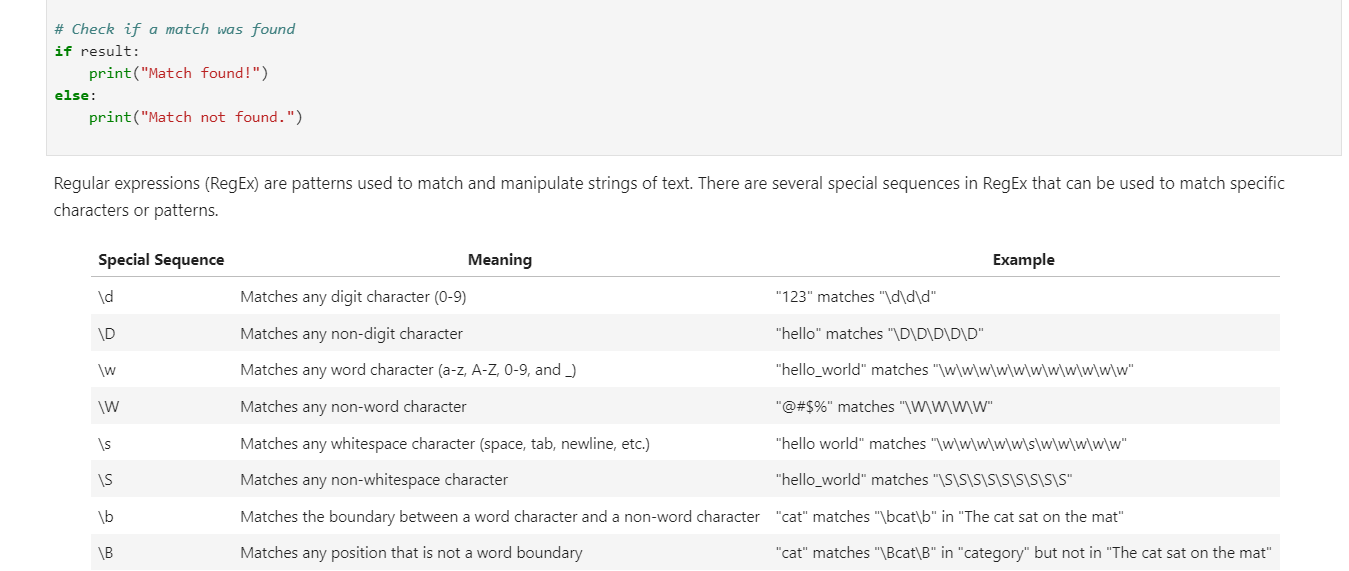
These are methods specifically designed for string manipulation. Strings in Python come with a variety of built-in methods that make it easier to perform common tasks. Some widely used string methods include:

* str.upper(): Converts all characters of the string to uppercase.
* str.lower(): Converts all characters of the string to lowercase.
* str.replace(old, new): Replaces all occurrences of the substring old with new.
* str.split(sep): Splits the string into a list, using sep as the delimiter.

For example, "hello".upper() would return "HELLO".

The main difference is that sequence methods can be used on any type of sequence in Python, not just strings, whereas string methods are specifically for string manipulation and will only work on string objects. This distinction is useful when you are working with different types of data in Python and need methods that can handle multiple data types or are specialized for strings.





Remember must check Hands-on lab of string for **RegEx.**

**Link for python basics:** [**https://author-ide.skills.network/render?token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJtZF9pbnN0cnVjdGlvbnNfdXJsIjoiaHR0cHM6Ly9jZi1jb3Vyc2VzLWRhdGEuczMudXMuY2xvdWQtb2JqZWN0LXN0b3JhZ2UuYXBwZG9tYWluLmNsb3VkL0lCTURldmVsb3BlclNraWxsc05ldHdvcmstUFkwMTAxRU4tU2tpbGxzTmV0d29yay9sYWJzL0NoZWF0X1NoZWV0X1dlZWstMS5tZCIsInRvb2xfdHlwZSI6Imluc3RydWN0aW9uYWwtbGFiIiwiYWRtaW4iOmZhbHNlLCJpYXQiOjE3MTE2Mzg1OTl9.Y\_C9kDKasuzH63vioeVvOEqVpsInCG9DLVj53MUyJg0**](https://author-ide.skills.network/render?token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJtZF9pbnN0cnVjdGlvbnNfdXJsIjoiaHR0cHM6Ly9jZi1jb3Vyc2VzLWRhdGEuczMudXMuY2xvdWQtb2JqZWN0LXN0b3JhZ2UuYXBwZG9tYWluLmNsb3VkL0lCTURldmVsb3BlclNraWxsc05ldHdvcmstUFkwMTAxRU4tU2tpbGxzTmV0d29yay9sYWJzL0NoZWF0X1NoZWV0X1dlZWstMS5tZCIsInRvb2xfdHlwZSI6Imluc3RydWN0aW9uYWwtbGFiIiwiYWRtaW4iOmZhbHNlLCJpYXQiOjE3MTE2Mzg1OTl9.Y_C9kDKasuzH63vioeVvOEqVpsInCG9DLVj53MUyJg0)

**Link for python usecase:** [**https://author-ide.skills.network/render?token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJtZF9pbnN0cnVjdGlvbnNfdXJsIjoiaHR0cHM6Ly9jZi1jb3Vyc2VzLWRhdGEuczMudXMuY2xvdWQtb2JqZWN0LXN0b3JhZ2UuYXBwZG9tYWluLmNsb3VkL0lCTURldmVsb3BlclNraWxsc05ldHdvcmstUFkwMTAxRU4tU2tpbGxzTmV0d29yay9sYWJzL0NoZWF0X1NoZWV0X1dlZWstMS5tZCIsInRvb2xfdHlwZSI6Imluc3RydWN0aW9uYWwtbGFiIiwiYWRtaW4iOmZhbHNlLCJpYXQiOjE3MTE2Mzg1OTl9.Y\_C9kDKasuzH63vioeVvOEqVpsInCG9DLVj53MUyJg0**](https://author-ide.skills.network/render?token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJtZF9pbnN0cnVjdGlvbnNfdXJsIjoiaHR0cHM6Ly9jZi1jb3Vyc2VzLWRhdGEuczMudXMuY2xvdWQtb2JqZWN0LXN0b3JhZ2UuYXBwZG9tYWluLmNsb3VkL0lCTURldmVsb3BlclNraWxsc05ldHdvcmstUFkwMTAxRU4tU2tpbGxzTmV0d29yay9sYWJzL0NoZWF0X1NoZWV0X1dlZWstMS5tZCIsInRvb2xfdHlwZSI6Imluc3RydWN0aW9uYWwtbGFiIiwiYWRtaW4iOmZhbHNlLCJpYXQiOjE3MTE2Mzg1OTl9.Y_C9kDKasuzH63vioeVvOEqVpsInCG9DLVj53MUyJg0)