import re

M="Tuesday’s report marks an 8.7 per cent increase in cases, compared to 7.7 per cent on Monday, 11.2 per cent on Sunday, 11.5 per cent on Saturday and 16.5 per cent on Friday.We should never sit back, this can come with vengeance,” Premier Doug Ford said at a news conference on Tuesday, referring to a decline in positive cases over the last few days.If we see a little decline by no means should we be sitting back and thinking that the curve is going the other way. If we see two, three weeks of the curve going down, then we are in the right direction but that doesn’t mean let up in any means. We have to keep going hard, right to the end, every single day and every single minute."

Search the string to see if it starts with "The" and ends with "Spain":

import re  
  
txt = "The Leo is in China"  
x = re.search("^The.\*China$", txt)

## RegEx Functions

The re module offers a set of functions that allows us to search a string for a match:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Function** | **Description** | | | | | | | |
| [findall](https://www.w3schools.com/python/python_regex.asp" \l "findall) | Returns a list containing all matches | | | | | | | |
| [search](https://www.w3schools.com/python/python_regex.asp" \l "search) | Returns a [Match object](https://www.w3schools.com/python/python_regex.asp" \l "matchobject) if there is a match anywhere in the string | | | | | | | |
| [split](https://www.w3schools.com/python/python_regex.asp" \l "split) | Returns a list where the string has been split at each match | | | | | | | |
| [sub](https://www.w3schools.com/python/python_regex.asp" \l "sub) | Replaces one or many matches with a string | | | | | | | |
| **Character** | **Description** | | | **Example** | | **Try it** | |
| [] | A set of characters | | | "[a-m]" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta1" \t "https://www.w3schools.com/python/_blank) | |
| \ | Signals a special sequence (can also be used to escape special characters) | | | "\d" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta2" \t "https://www.w3schools.com/python/_blank) | |
| . | Any character (except newline character) | | | "he..o" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta3" \t "https://www.w3schools.com/python/_blank) | |
| ^ | Starts with | | | "^hello" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta4" \t "https://www.w3schools.com/python/_blank) | |
| $ | Ends with | | | "world$" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta5" \t "https://www.w3schools.com/python/_blank) | |
| \* | Zero or more occurrences | | | "aix\*" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta6" \t "https://www.w3schools.com/python/_blank) | |
| + | One or more occurrences | | | "aix+" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta7" \t "https://www.w3schools.com/python/_blank) | |
| {} | Exactly the specified number of occurrences | | | "al{2}" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta8" \t "https://www.w3schools.com/python/_blank) | |
| | | Either or | | | "falls|stays" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_meta9" \t "https://www.w3schools.com/python/_blank) | |
| () | Capture and group | | |  | |  | |
| \A | | Returns a match if the specified characters are at the beginning of the string | "\AThe" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq1" \t "https://www.w3schools.com/python/_blank) | |
| \b | | Returns a match where the specified characters are at the beginning or at the end of a word | r"\bain" r"ain\b" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq2" \t "https://www.w3schools.com/python/_blank) [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq2-2" \t "https://www.w3schools.com/python/_blank) | |
| \B | | Returns a match where the specified characters are present, but NOT at the beginning (or at the end) of a word | r"\Bain" r"ain\B" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq3" \t "https://www.w3schools.com/python/_blank) [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq3-2" \t "https://www.w3schools.com/python/_blank) | |
| \d | | Returns a match where the string contains digits (numbers from 0-9) | "\d" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq4" \t "https://www.w3schools.com/python/_blank) | |
| \D | | Returns a match where the string DOES NOT contain digits | "\D" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq5" \t "https://www.w3schools.com/python/_blank) | |
| \s | | Returns a match where the string contains a white space character | "\s" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq6" \t "https://www.w3schools.com/python/_blank) | |
| \S | | Returns a match where the string DOES NOT contain a white space character | "\S" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq7" \t "https://www.w3schools.com/python/_blank) | |
| \w | | Returns a match where the string contains any word characters (characters from a to Z, digits from 0-9, and the underscore \_ character) | "\w" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq8" \t "https://www.w3schools.com/python/_blank) | |
| \W | | Returns a match where the string DOES NOT contain any word characters | "\W" | | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_seq9" \t "https://www.w3schools.com/python/_blank) | |
| \Z | | Returns a match if the specified characters are at the end of the string |  | |  | |

## Sets

A set is a set of characters inside a pair of square brackets [] with a special meaning:

|  |  |  |
| --- | --- | --- |
| **Set** | **Description** | **Try it** |
| [arn] | Returns a match where one of the specified characters (a, r, or n) are present | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set1" \t "https://www.w3schools.com/python/_blank) |
| [a-n] | Returns a match for any lower case character, alphabetically between a and n | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set2" \t "https://www.w3schools.com/python/_blank) |
| [^arn] | Returns a match for any character EXCEPT a, r, and n | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set3" \t "https://www.w3schools.com/python/_blank) |
| [0123] | Returns a match where any of the specified digits (0, 1, 2, or 3) are present | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set4" \t "https://www.w3schools.com/python/_blank) |
| [0-9] | Returns a match for any digit between 0 and 9 | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set5" \t "https://www.w3schools.com/python/_blank) |
| [0-5][0-9] | Returns a match for any two-digit numbers from 00 and 59 | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set6" \t "https://www.w3schools.com/python/_blank) |
| [a-zA-Z] | Returns a match for any character alphabetically between a and z, lower case OR upper case | [Try it »](https://www.w3schools.com/python/trypython.asp?filename=demo_regex_set7" \t "https://www.w3schools.com/python/_blank) |
| [+] | In sets, +, \*, ., |, (), $,{} has no special meaning, so [+] means: return a match for any + charac |  |