

Lecture 3: String Manipulation, Gauss & Check, Approximation, Bisection

Strings:

- sequence of case sensitive characters
- can compare strings with ==, >, <, ...
- len() is a function used to retrieve length of your ~~the~~ string in the parentheses

$s = "abc"$

$\text{len}(s) = 3$

- square brackets used to perform indexing into a string to get the value at a certain index

$s = "abc"$

$s[0] \rightarrow 'a'$

$s[-1] \rightarrow 'c'$

- Slicing string using [start: stop: step]

- if given two numbers, [start: stop],
 $\text{step} = 1$ by default

- you can also omit numbers and leave just colons

$s = "abcdefgh"$

$s[3:6] \rightarrow "def"$ same as $s[3:6:1]$

$s[3:6:2] \rightarrow "df"$

$s[:5] \rightarrow "abcdefg"$ same as $s[0:\text{len}(s):1]$

$s[::-1] \rightarrow "gfedcba"$ same as $s[-1:-(\text{len}(s)+1):-1]$

$s[4:1:-2] \rightarrow "ec"$

- Strings are immutable: can't be modified