## Basics

### General

REPL

Read Evaluates Prints Loop

Scripting Language

### Comments

# single line comments

""" """ used as multi line comment

''' ''' used as multi line comment

### Keywords

True False

and or not

## Data Types

int integer

float floating point numbers

str strings

bool True

False

## Operators

### arithmetic

+ add

- subtract

\* multiplication

/ division

= assignment

multiple assignment is possible

\*\* power

// floor division

% modulo (remainder)

### comparison (relative)

< less than

> greater than

<= less than or equal to

>= greater than or equal to

== equal to

!= not equal to

### logical

and

or

not

## Functions

### general

print()

type()

len()

## strings

text data

double quotes " "

single quotes ' '

index

negative index

index error

slice

no index error

step

| c | a | p | t | a | i | n |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| -7 | -6 | -5 | -4 | -3 | -2 | -1 |

concat +

immutable

### string functions/methods

functions Description

capitalize() Converts the first character to uppercase

casefold() Converts string into lower case

center() Returns a centered string

count() Returns the number of times a specified value occurs in a string

endswith() Returns true if the string ends with the specified value

find() Searches the string for a specified value and returns the position of where it

was found

format() Formats specified values in a string

index() Searches the string for a specified value and returns the position of where it

was found

isalnum() Returns True if all characters in the string are alphanumeric

isalpha() Returns True if all characters in the string are in the alphabet

isdecimal() Returns True if all characters in the string are decimals

isdigit() Returns True if all characters in the string are digits

islower() Returns True if all characters in the string are lower case

isnumeric() Returns True if all characters in the string are numeric

isspace() Returns True if all characters in the string are whitespaces

whitespaces means a tab, new line, space etc..

istitle() Returns True if the string follows the rules of a title

isupper() Returns True if all characters in the string are upper case

join() Converts the elements of an iterable into a string

lower() Converts a string into lower case

lstrip() Returns a left trim version of the string

partition() Returns a tuple where the string is parted into three parts

replace() Returns a string where a specified value is replaced with a specified value

rfind() Searches the string for a specified value and returns the last position of where

it was found

rindex() Searches the string for a specified value and returns the last position of where

it was found

rsplit() Splits the string at the specified separator, and returns a list

split() Splits the string at the specified separator, and returns a list

splitlines() Splits the string at line breaks and returns a list

startswith() Returns true if the string starts with the specified value

strip() Returns a trimmed version of the string

swapcase() Swaps cases, lower case becomes upper case and vice versa

title() Converts the first character of each word to uppercase

upper() Converts a string into upper case

### escape sequences

“\n” new line

“\t” tab

“\b” backspace

“\f” form feed

“\v” vertical tab

\\ \

\" "

\' '

### string formats

r raw

f format

.format()

## list

any/every kind of data

[ ]

heterogenous (mix the data types)

index

negative index

indexError (out of bounds)

slice

no indexError

step

mutable

nesting

list within a list

### list functions/methods

append() extend() insert()

reverse()

pop() remove() clear()

count() index()

sort()

## 