## basics

REPL

read, eval, print, loop

.py (scripts)

.ipynb (python notebooks)

### comments:

# single line

""" """ used as multiline comment

## Data Types:

### basic data types:

int integers

float floating point

complex (6+7i)

6+7j

strings

bool True

False

### data structs:

list

tuple

set

dict

## Functions:

### generic:

print()

type()

len()

### conversion (cast):

int()

float()

str()

complex()

list()

set()

tuple()

## Operators:

### arithmetic :

+ add

- subtract

\* multiply

/ division

% modulo

(remainder)

= assignment

// floor division

\*\* power

not available:

++ --

### multiple assignment:

a = b = c = 33

### relational (conditional):

<

<=

>

>=

==

!=

### logical:

and

or

not

### bitwise:

^

<<

>>

&

|

### identity:

### membership:

## strings:

double or single quotes

indexed

negative index

slice

no IndexError

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a | i | r | b | u | s |
| 0 | 1 | 2 | 3 | 4 | 5 |
| -6 | -5 | -4 | -3 | -2 | -1 |

immutable

functions:

capitalize, upper, lower, isupper, islower

isalpha, isalnum, isdigit

count, index, rindex

replace, endswith

…….

## list:

nay kind of data (heterogenous)

indexed

negative index

slice

no IndexError

mutable

nested

references

functions: count, index

sort, sort(reverse=True)

reverse

pop, remove

insert, append, extend

copy

## tuple:

any kind of data (heterogenous)

indexed

negative index

slice

no IndexError

immutable

nested

functions: count, index

## set:

no duplicates (only unique)

unordered

any kind of immutable data (heterogenous)

~~index~~

sets by themselves mutable

members should be immutable

functions: tuple:

any kind of data (heterogenous)

indexed

negative index

slice

no IndexError

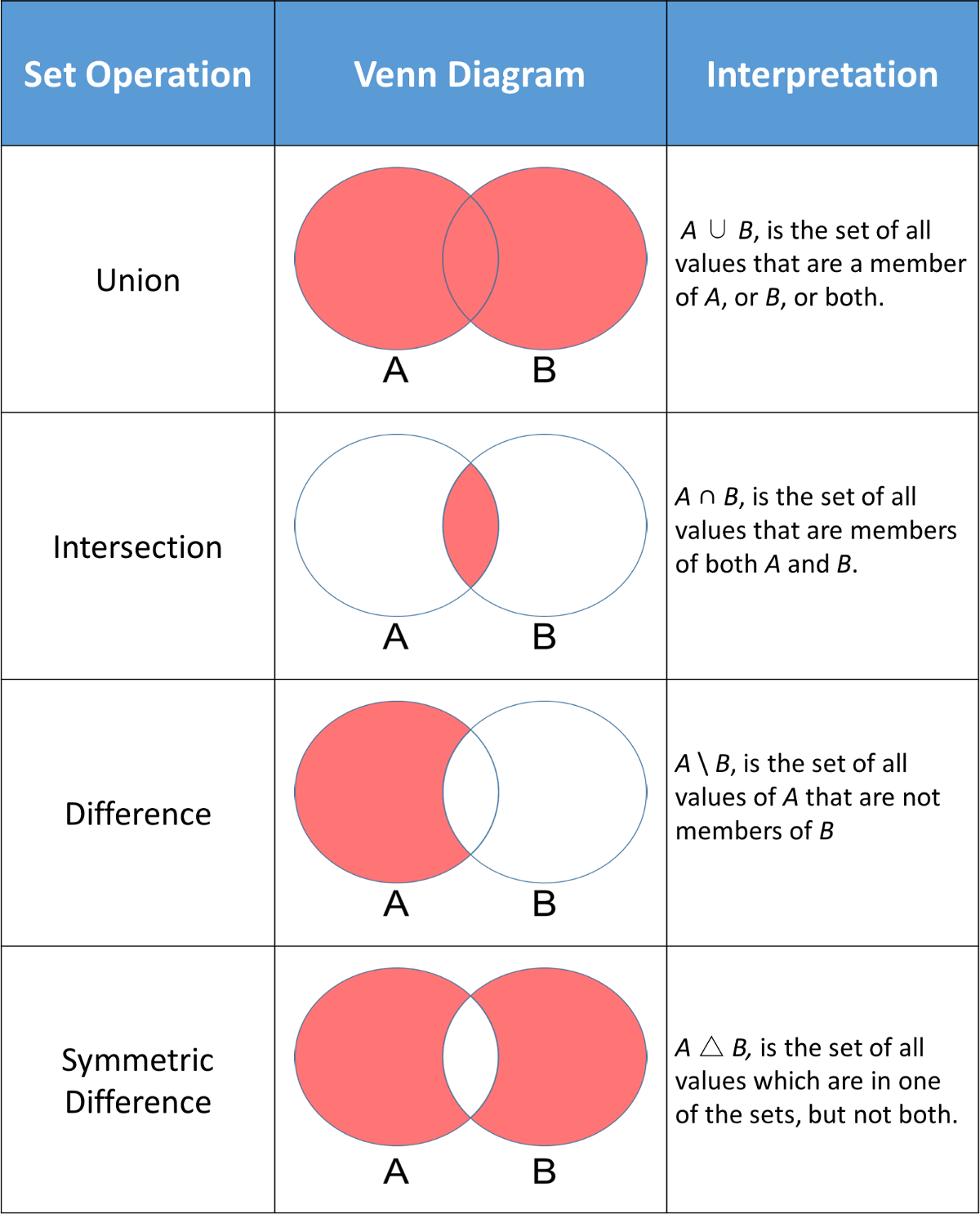
immutable

nested

functions: add, clear,

……

…..



parked topics:

security