

Python Notes

Basic arithmetic

- +
- -
- *
- /
- // (floor division)
- %
- ** (power)

String

- len()
- upper()
- lower()
- split()
- format()
- join()
- [Start from : before this:jump]

String formatting

- %s : string placeholder
- %r : including quotation mark and escape sequence.
- %d : converts numbers to integer without rounding.
- f : %5.1f / 5 minimum number including spaces if need / 1 float number
- ^ : middle
- < : left
- > : right

List:

- []
- append()
- pop()
- reverse()

Tuples:

- ()
- len()
- index()
- count()

Dictionaries:

- {}
- keys()
- values()
- items()

Passwords:

Libraries:

- random
 - **choices**
- string
 - **ascii_letters**: capital and small letters
 - **digits**: all numbers from 0-9
 - **Chr**: char value
 - **Ord**: ascii code
 - **Isalpha**:

- Encryption
 - **Cryptography: generate key for rsa and aes**
 - **pycryptodome**

Password population:

- Digits
 - Characters
 - Special characters (!@#\$%^&*())
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Encryption Methods:

- **Caesar:** Shifting key times from right to left or left to right.
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Networking:

Libraries:

- Subprocess
 - Run: run a command, like:
 - Ip config
 - Nslookup
 - hostname
 - Stdout: print the result of the command
- Paramiko:
 - sshclient
- scrapy: It can be used to forge or decode packets of a wide number of protocols
- socket: Sockets are used to create a connection between a client program and a server program.
- requests: making HTTP requests
 - Get: return data

- Post: send data
 - Put: like post, used with media
 - Patch: to update
 - Delete: delete
 - Head: like get but without body
 - Options: communication options
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File Handling:

Libraries:

- **Folders**

- os
 - listdir: see the directories
 - mkdir : create new dir
 - rename: rename file or folder
 - rmdir: remove directory
 - path.exists(): return true or false
 - getcwd: get current directory
 - chdir: change current directory
 - pardir: parent directory
 - makedirs: create nested directories
 - help

- **Files**

- `f = open (' text.txt ' , ' w || r || x ')`
 - `f.write()`
 - `f.close()`