JSON, YAML and configuration files

JSON

JSON stands for JavaScript Object Notation and is a lightweight format for storing and transporting data. Json is often used when data is sent from a server to a web page.

```
>>> import json
>>> with open("filename.json", "r") as f:
... content = json.load(f)
```

Write a JSON file with:

```
>>> import json
>>> content = {"name": "Joe", "age": 20}
>>> with open("filename.json", "w") as f:
... json.dump(content, f, indent=2)
```

YAML

Compared to JSON, YAML allows a much better human maintainability and gives ability to add comments. It is a convenient choice for configuration files where a human will have to edit.

There are two main libraries allowing to access to YAML files:

- <u>PyYaml</u>
- Ruamel.yaml

Install them using pip install in your virtual environment.

The first one is easier to use but the second one, Ruamel, implements much better the YAML specification, and allow for example to modify a YAML content without altering comments.

Open a YAML file with:

```
>>> from ruamel.yaml import YAML
>>> with open("filename.yaml") as f:
... yaml=YAML()
... yaml.load(f)
```

Anyconfig

<u>Anyconfig</u> is a very handy package, allowing to abstract completely the underlying configuration file format. It allows to load a Python dictionary from JSON, YAML, TOML, and so on.

Install it with:

```
pip install anyconfig
```

Usage:

```
>>> import anyconfig
>>> conf1 = anyconfig.load("/path/to/foo/conf.d/a.yml")
```