Easily read config files

1. What is the point excactly

Usually, when writing programs we need to read parameter values from a config file.
These configfiles can be in different formats:

- the often used .ini format
- can also be in XML format

This demo shows how to read parameters from an .ini file. It uses the Python Configuration File Parser, see here
Python Configparser

Using the **ConfigRead class** it is easy to write a small program that needs parameters from a config file.

The Ini file structure is described here - usually we do not need the Default section.
Ini File docu

2. How to do it

In the Python program we need to declare a Python directory containing all the parameter (as keys) and their default values (as values). Example:

```
configval={
        "url"           : "defaulturl",
        "username"      : "usernamedefault",
        "password"      : "passworddefault",
        "abc"           : "default",
        "timeout"       : 123,
        "xmlfile_prefix" : "g1",
        "setup_mqtt"    : 8,
        "termination"   : "yes",
        }
```

Our corresponding configfile named **demo_config.ini** (section peter) looks like this:

```
[peter]
# Section for demo ConfigRead
url = www.sommer.ch
username = mike124
password = mypassword
abcd = thealphabet
xmlfile_prefix = h1
setup_mqtt = 1
notknown = mike
```

As we can see, the config file contains serval other sections. The demo program only uses the entries from section peter.
The file may contain entries that are **not** declared in the Python dir in the program. These file entries are simply **skipped**. Also there might be entries in the dir but not in the file. Their value is untouched by the read operation.

See program **demo_readconfig.py** for the implementation.

Run this program with:

python3 demo_readconfig.py
or
python3 demo_readconfig.py -D

Note1
: I always include class definition files in a folder sub. Since the
class ConfigRead inherits from the class MyPrint, both the files configread.py and myprint.py can be found in this folder..

Note2
All the demo programs in this repository use one and the same configfile - they simply read from their corresponding section.
Normally, every application would have its own configfile.

I tried it Sept. 30 on my Pi and it works like a charm.

Also checkout my webpages:

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YouTube Channel

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