# 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

The Ini file structure is described here - usually we dot 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 looks like this:

```
# config file for config demo
[peter]
# Config file Test
#
url = "www.sommer.ch"
username = "mike123"
password = "mypassword"
abc = "thealphabet"
xmlfile_prefix = "h1"
setup_mqtt = 1
notknown = "mike"


[mary]
term = "done"
kickstart = "yes"
#---------------------
```

As we can see, the files contains two sections 'peter' and 'mary'. 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.

configread

See program testconfig.py for the implementation. All code is in the src dir. Copy its content to the Pi. Note: I always include class definition files in a dir sub. Since the class ConfigRead inherits from the class myprint, both the files configread.py and myprint.py can be found in this dir.

Run this program with:

python3 testconfig.py
or
python3 testconfig.py -D

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

Do not hesitate to contact me if questions come up.
pboxler@sunrise.ch

Also checkout my webpages:

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YouTube Channel

September 2020, Peter K. Boxler