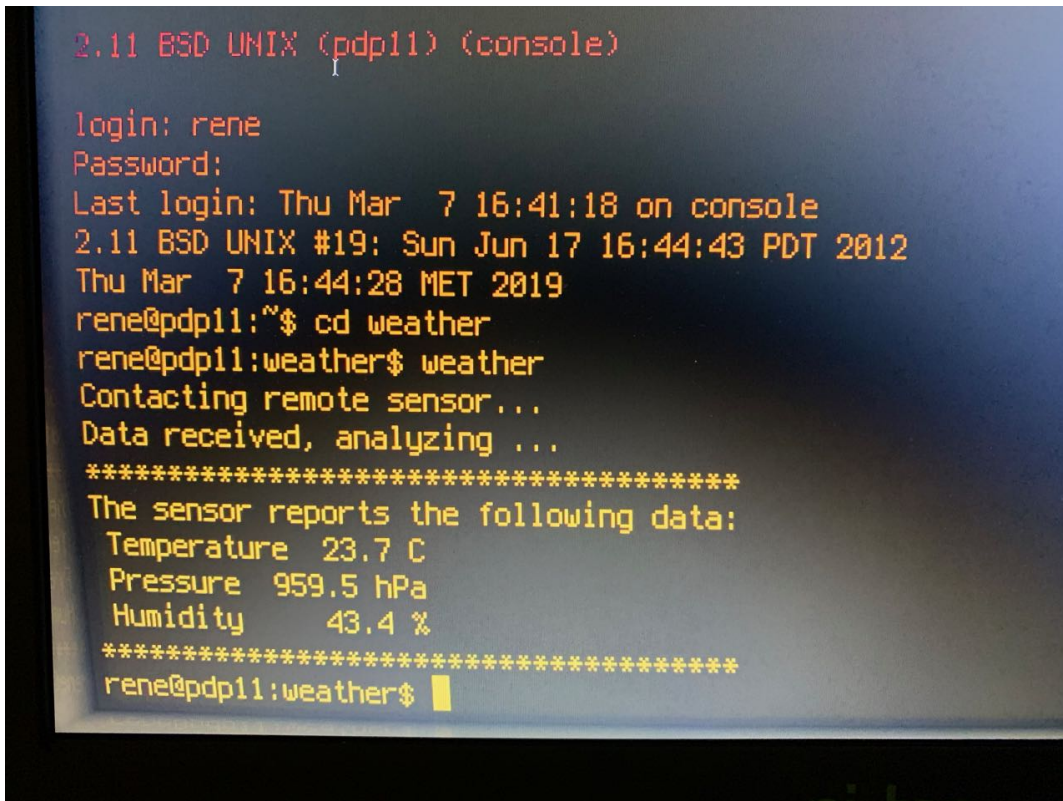


### A cool-retro-weatherstation



```
2.11 BSD UNIX (pdp11) (console)

login: rene
Password:
Last login: Thu Mar  7 16:41:18 on console
2.11 BSD UNIX #19: Sun Jun 17 16:44:43 PDT 2012
Thu Mar  7 16:44:28 MET 2019
rene@pdp11:~$ cd weather
rene@pdp11:weather$ weather
Contacting remote sensor...
Data received, analyzing ...
*****
The sensor reports the following data:
  Temperature  23.7 C
  Pressure     959.5 hPa
  Humidity      43.4 %
*****
rene@pdp11:weather$
```

This is an ongoing project. It is currently functional, but I have plans to add further functionality in the near future.

If you want to make one yourself, proceed as follows:

Using the other tutorials in my github repo <https://github.com/rricharz/pdp11-2.11bsd>, do the following:

- add a user in 2.11 BSD
  - set date and time automatically during bootup (to be used to save weather data)
  - install cool-retro-term
  - prepare a remote pizerow for the weather sensor (see “using rsh to run an command”)
  - install a BME280 weather sensor on the remote pizerow, see <https://www.raspberrypi-spy.co.uk/2016/07/using-bme280-i2c-temperature-pressure-sensor-in-python/>
  - A copy of the python script to read the sensor data is in this repository under weather/sensor
  - Make sure that this script works properly on the remote pizerow and put a copy into /home/pi/bin on the remote pizerow
  - Log into 2.11BSD using cool-retro-term as the newly created user
- ```
mkdir weather
cd weather
```
- Use any available means (such as for example FileZilla), to copy the files from weather/BSD into the new weather directory

- Execute the newly copied command weather in 2.11BSD

How to proceed from here:

- Improve the weather display in 2.11BSD
- Call the program in a loop in reasonable intervals
- Save the data in a file on the PiDP-11
- Analyze current and past weather data.