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*****Default*****  
MicroPython Pico-Ice nanoV  
11/10/24  
*****Default*****
```

Running in a virtual environment on Raspberry Pi 5.

“cd virtual-python-xstools”

“. virtp.sh”

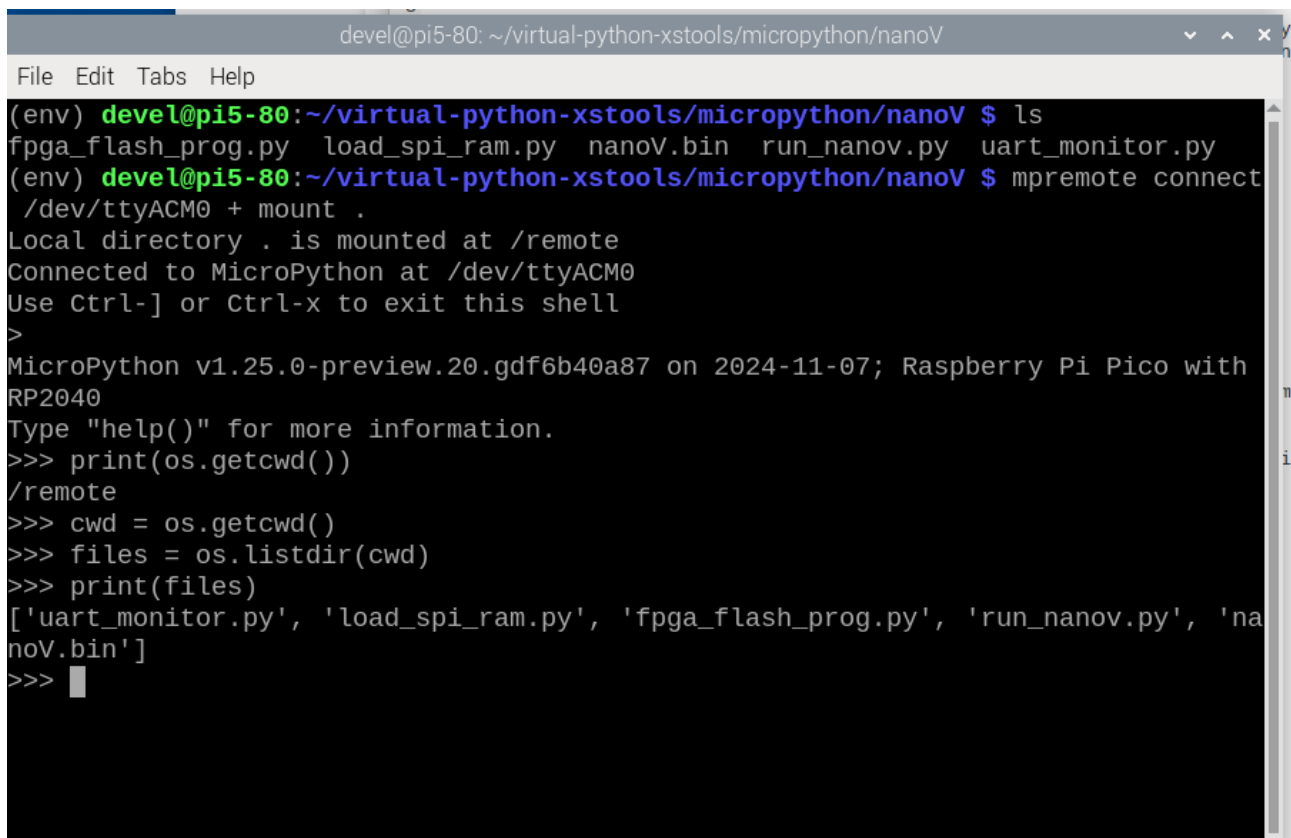
“cd micropython/nanoV”

Connect to rp2040 of the pico-ice which has the firmware.uf2 running MicroPython.

MicroPython remote control: mpremote

The `mpremote` command line tool provides an integrated set of utilities to remotely interact with, manage the filesystem on, and automate a MicroPython device over a serial connection.

“mpremote connect /dev/ttyACM0 + mount .”



```
devel@pi5-80: ~/virtual-python-xstools/micropython/nanoV  
File Edit Tabs Help  
(env) devel@pi5-80:~/virtual-python-xstools/micropython/nanoV $ ls  
fpga_flash_prog.py load_spi_ram.py nanoV.bin run_nanov.py uart_monitor.py  
(env) devel@pi5-80:~/virtual-python-xstools/micropython/nanoV $ mpremote connect  
/dev/ttyACM0 + mount .  
Local directory . is mounted at /remote  
Connected to MicroPython at /dev/ttyACM0  
Use Ctrl-] or Ctrl-x to exit this shell  
>  
MicroPython v1.25.0-preview.20.gdf6b40a87 on 2024-11-07; Raspberry Pi Pico with  
RP2040  
Type "help()" for more information.  
>>> print(os.getcwd())  
/remote  
>>> cwd = os.getcwd()  
>>> files = os.listdir(cwd)  
>>> print(files)  
['uart_monitor.py', 'load_spi_ram.py', 'fpga_flash_prog.py', 'run_nanov.py', 'na  
noV.bin']  
>>> █
```

At the prompt execute “import fpga_flash_prog” which will read the file “nanoV.bin” and program the iCE40UP5K of the pico-ice.

Use Ctrl-] or Ctrl-x to exit this shell

>

MicroPython v1.25.0-preview.20.gdf6b40a87 on 2024-11-07; Raspberry Pi Pico with RP2040

Type "help()" for more information.

>>> print(os.getcwd())

/remote

>>> cwd = os.getcwd()

>>> files = os.listdir(cwd)

>>> print(files)

['uart_monitor.py', 'load_spi_ram.py', 'fpga_flash_prog.py', 'run_nanov.py', 'nanov.bin']

>>> import fpga_flash_prog

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Program done

Verify done

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>>>