

**If your Raspberry Pi comes with PYTHON 3 then this document is for you to run dnn.py in PYTHON version 3.  
Otherwise you can ignore this document!**

1. Create a separate PYTHON environment for running dnn.py version 2.7 script to version 3.11
  - 1.1. `python -m venv /home/user/dnn3env`
2. Activate dnn3env environment
  - 2.1. `source /home/user/dnn3env/bin/activate`
3. We need 3 packages to install
  - 3.1. `pip install tensorflow`
  - 3.2. `pip install 2to3`
  - 3.3. `pip install opencv-python`
4. Convert dnn.py and model.py to python version 3 using 2to3 package
  - 4.1. `2to3 -w dnn.py`
  - 4.2. `2to3 -w model.py`
5. Convert some tensorflow related commands for our dnn.py and model.py scripts to run it on PYTHON 3
  - 5.1. `tf_upgrade_v2 --infile dnn.py --outfile dnn_u.py`
  - 5.2. `tf_upgrade_v2 --infile model.py --outfile model_u.py`
6. Rename your files after step 4
  - 6.1. `mv dnn_u.py dnn.py`
  - 6.2. `mv model_u.py model.py`
7. Add following line after “import tensorflow as tf” in dnn.py
  - 7.1. `tf.compat.v1.disable_v2_behavior()`
8. Now following command should run your dnn.py script in PYTHON 3
  - 8.1. `python dnn.py`