Activate spi kernel

<https://luma-led-matrix.readthedocs.io/en/latest/install.html>

# install python

python3 –version

sudo apt-get update

install pip

sudo -H pip3 install --upgrade pip

(https://github.com/rm-hull/luma.examples)

# install luma led

sudo usermod -a -G spi,gpio pi

sudo apt install build-essential python-dev python-pip libfreetype6-dev libjpeg-dev libopenjp2-7 libtiff5

sudo -H pip install --upgrade luma.led\_matrix

install other packages

pip install regex

pip install argparse

pip install times

pip install DateTime

python3 <skriptname>

cronjob:

#debugging:

#sudo tail -f /var/log/cron.log

#https://stackoverflow.com/questions/4811738/how-to-log-cron-jobs

#debug mail

#https://askubuntu.com/questions/222512/cron-info-no-mta-installed-discarding-output-error-in-the-syslog

#sudo apt install postfix

#sudo tail -f /var/mail/root