#setSerial.py - a-gsm 2.064 set serial communication speed example utility
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# http://itbrainpower.net

# Raspberry PI - a-gsm wiring connection:
# Legal disclaimer:
# Incorrect or faulty wiring and/or connection can damage your RPi and/or your a-gsm board!
# Following directives are provided "AS IS" in the hope that it will be useful, but WITHOUT
ANY WARRANTY!
# Do the wiring on your own risk!

# name           RPi a-gsm shield
# POWER          16 D7  - power(UP/DOWN) NOT MANDATORY FOR THIS DEMO CODE!
# RESET          18 D6  - reset NOT MANDATORY FOR THIS DEMO CODE!
#a-gsm STATUS    12 D5  - status NOT MANDATORY FOR THIS DEMO CODE!
# serial TXD0    08 D4  - tx(rxd)
# serial RXD0    10 D3  - rx(txd)
# 5V             02/04 5V  - on Arduino power IN connector
# GND            06/14 GND - on Arduino power IN connector

# IMPORTANT:
# a-gsm's POWER supply input selector must be in "use 5V pin" position

# This utility must be runned with a-gsm board POWERED UP! If if the a-gsm green led does
not lights continuous,
# you can press the a-gsm power switch for about 1 second, in order to start the board

import os
import serial
from time import sleep
from sys import argv

if len(argv)!=3:
    print("usage: python setserial.py initialSpeed finalSpeed")
exit(0)
agsm = serial.Serial("/dev/ttyAMA0", argv[1])
agsm.open()
print("Set and save the new speed")
agsm.write("AT+IPR="+argv[2]+";&w;\r\n")
agsm.flushInput()
agsm.close()
sleep(2)
agsm = serial.Serial("/dev/ttyAMA0", argv[2])
agsm.open()
agsm.flushInput()
agsm.write("AT\r\n")
print("Check @ new speed")
message=agsm.readline()
print message
message=agsm.readline()
agsm.close()
print message
if(message.find("OK") != -1):
    print ("\r\n**Your a-gsm has been set at: "+argv[2]+" bps speed**")