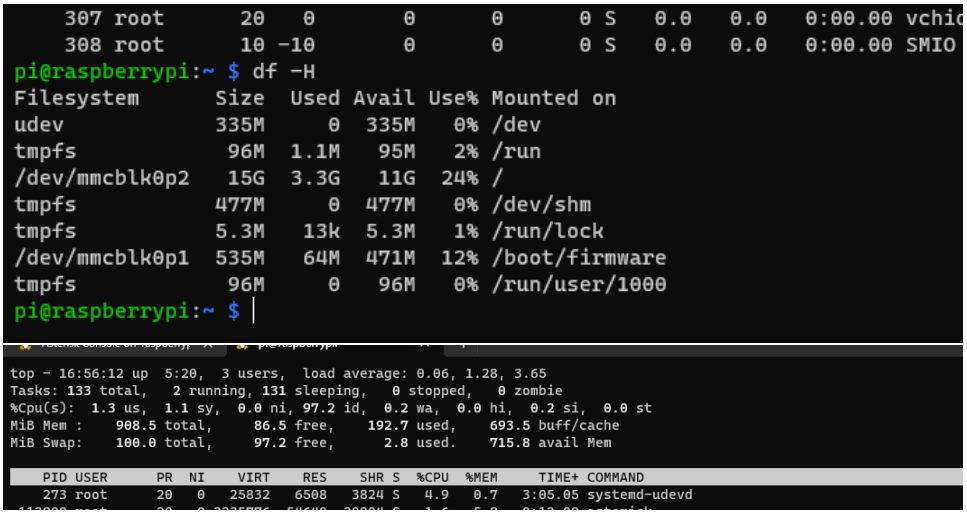
Michael Starks & Sovann Chak

Project 2 Module 4

ECEN 5803 – 002

1. For development of code in Linux, GCC and GDB are the preferred compiler and debugger to use. Go to www.asterisk.org and download Asterisk. Look at https://wiki.asterisk.org/wiki/display/AST/Beginning+Asterisk and read the sections on Beginning Asterisk, Installing Asterisk, and the Hello World Project. Use either the Angstrom package repository to install the asterisk package directly after connecting the Raspberry Pi Model 3 to the internet under Linux. Carefully read the documentation and online guides and incorporate Asterisk, the open source PBX into one of your Linux SD cards. How much memory is used by the code? (What is the image size?)

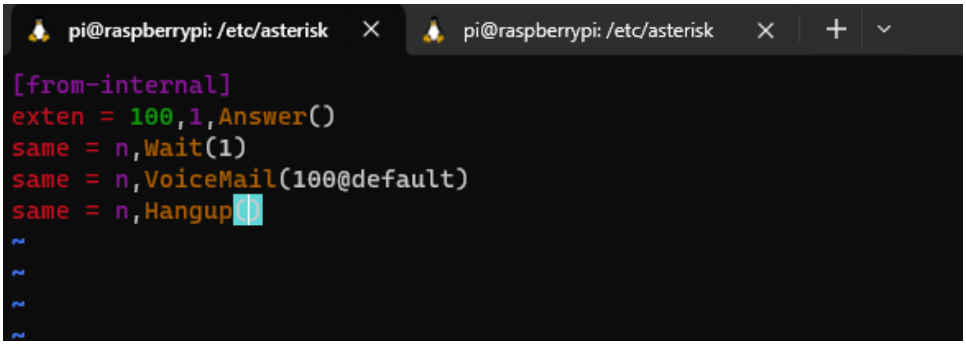


2. Using either a SIP phone plugged into the same LAN as the Raspberry Pi Model 3 (you may need an Ethernet switch to create the network), or with a PC running a softphone application connected to the Raspberry Pi Model 3, configure Asterisk to provide a voicemail message at extension 100. Configure your SIP phone or softphone and register with Asterisk. Show your Asterisk setup in a screenshot.

```
[transport-udp]
type=transport
protocol=udp
bind=0.0.0.0

[6001]
type=endpoint
context=from-internal
disallow=all
allow=ulaw
auth=6001
aors=6001

[6001]
type=auth
auth_type=userpass
password=unsecurepassword
username=6001

[6001]
type=aor
max_contacts=1
~
~
~
~
~
```

Please see the attached video voice_mail.mp4.

3. Make a call to extension 100 and record what you hear. Show your Asterisk setup in a screenshot.



Please see the attached video hello_world.mp4.

4. [Optional, for 5 extra credit points] Add another SIP phone or softphone to the network, and make a phone-to-phone call.

   Please see the attached video extra_credit.mp4.