Installation Snappy:

```
Divyas-MBP:~ divyamereddy$ brew install snappy
Updating Homebrew...
==> Auto-updated Homebrew!
Updated Homebrew from 91f980208 to 646d69613.
Updated 2 taps (homebrew/core, caskroom/cask).
==> New Formulae
ballerina             boost-python3         coreos-ct             howdoi                libbitcoin-consensus  posh                  qtkeychain            shelltestrunner       siril
bareos-client         chrome-export         gocryptfs             krakend               mdcat                 primer3               restview              shogun                unravel
==> Updated Formulae
mercurial ✔                consul                     fonttools                  i2p                        mas                        postgresql@9.5             swiftformat
abnfgen                    cpprestsdk                 fossil                     ideviceinstaller           mbedtls                    pre-commit                 syncthing
advancemame                cryfs                      freedink                   igv                        metabase                   presto                     taisei
akamai                     davmail                    freeipmi                   infer                      metricbeat                 prips                      telegraf
amber                      dbus                       fribidi                    influxdb                   mgba                       proguard                   terraform
angular-cli                dbus-glib                  frugal                     isc-dhcp                   mikutter                   py2cairo                   terragrunt
ansible                    dcmtk                      fuse-zip                   jenkins                    minimal-racket             py3cairo                   tig
```

python:

Strat server:

#!/usr/bin/env python

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#from BaseHTTPServer import BaseHTTPRequestHandler, HTTPServer

import http.server

import socketserver

import avro.ipc as ipc

import avro.protocol as protocol

import avro.schema as schema



PROTOCOL = protocol.Parse(open("../avro/mail.avpr").read())



class MailResponder(ipc.Responder):

    def __init__(self):

        ipc.Responder.__init__(self, PROTOCOL)



    def invoke(self, msg, req):

        if msg.name == 'send':

            message = req['message']
```

```
            return ("Sent message to " + message['to']
                    + " from " + message['from']
                    + " with body " + message['body'])
        else:
            raise schema.AvroException("unexpected message:", msg.getname())



Handler = http.server.SimpleHTTPRequestHandler
class MailHandler(Handler):
  def do_POST(self):
    self.responder = MailResponder()
    call_request_reader = ipc.FramedReader(self.rfile)
    call_request = call_request_reader.read_framed_message()
    resp_body = self.responder.respond(call_request)
    self.send_response(200)
    self.send_header('Content-Type', 'avro/binary')
    self.end_headers()
    resp_writer = ipc.FramedWriter(self.wfile)
    resp_writer.write_framed_message(resp_body)
```

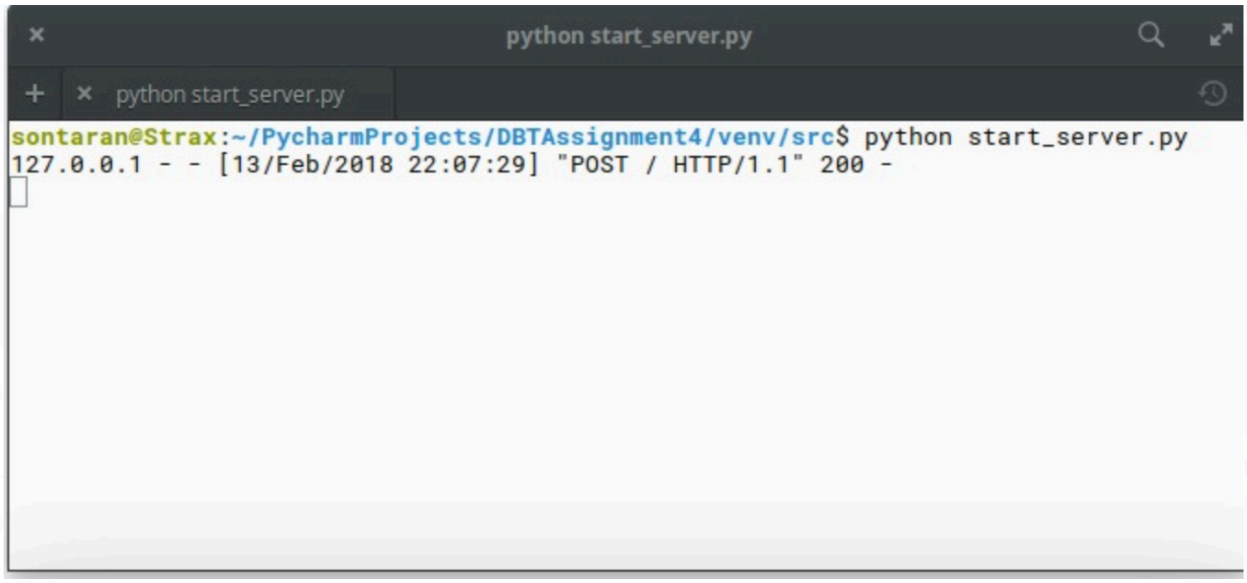
```
server_addr = ('localhost', 9090)

if __name__ == '__main__':

    server = socketserver.TCPServer(server_addr, MailHandler)

    server.allow_reuse_address = True

    server.serve_forever()
```



Run hello world:

```
import sys

import http.client as client

import avro.ipc as ipc
import avro.protocol as protocol

PROTOCOL = protocol.Parse(open("../avro/mail.avpr").read())

server_addr = ('localhost', 9090)

class UsageError(Exception):
   def __init__(self, value):
```

```
        self.value = value
    def __str__(self):
        return repr(self.value)

if __name__ == '__main__':
    if len(sys.argv) != 4:
        raise UsageError('Usage: <to> <from> <body>')

    # client code - attach to the server and send a message
    client = ipc.HTTPTransceiver(server_addr[0], server_addr[1])
    requestor = ipc.Requestor(PROTOCOL, client)

    # fill in the Message record and send it
    message = dict()
    message['to'] = sys.argv[1]
    message['from'] = sys.argv[2]
    message['body'] = sys.argv[3]

    params = dict()
    params['message'] = message
    print ("Result: " + requestor.request('send', params))

    # cleanup
    client.close()
```