run\_client.py

```
1 from socket import *
 2 import sys
 3 import time
5 HOST = ''
 6 PORT = 5008
 7 SERVERHOST = ''
8 SERVERPORT = 5009
9 ADDRESS = "192.168.100.255"
10 WAITINGTIME = 10
11
12 def get alivings(clientsocket):
13
       serversock = socket()
       serversock.setsockopt(SOL_SOCKET, SO_REUSEADDR, 1)
14 #
15
       serversock.bind((SERVERHOST, SERVERPORT))
16
17
       serversock.listen(300)
18
       print('Waiting for connections...')
19
20
       servernum = 0
21
       tstart = time.time()
22
23
       clientsocket.sendto(b'raspi resreq', (ADDRESS, PORT))
24
       while True:
25
26
            clientsock, client address = serversock.accept()
27
            servernum += 1
28
            print("Received[", servernum, "] from", client_address, ": ", clientsock.rec
            cv(4096))
29
30
            clientsock.close()
31
32
            tcurrent = time.time()
33
            pasttime = tcurrent - tstart
34
            #print(f"Past time: {pasttime}")
35
36
           if (pasttime > WAITINGTIME):
37
               break
38
39
       serversock.close()
40
41
       return servernum
42
43 s = socket(AF_INET, SOCK_DGRAM)
44 s.setsockopt(SOL_SOCKET, SO_BROADCAST, 1)
45 s.bind((HOST, PORT))
46
47 while True:
       msg = raw_input("> ")
48 #
49 # s.sendto(msg, (ADDRESS, PORT))
50
        msg = input("si> ")
51 #
       s.sendto(msg.encode(), (ADDRESS, PORT))
52
       print(msg)
53
54 #
      if msg == "h":
55 #
            print(".")
56 #
            print("reboot")
57 #
            print("shutdown")
            print("alivings")
58 #
59 #
            break
```

```
60
        if msg == ".":
61
62
           break
63
        if msg == "reboot":
64
65
           s.sendto(b'raspi reboot', (ADDRESS, PORT))
66
            print('Paspberry-pi servers are rebooting')
67
           break
68
69
        if (msg == "shutdown" or msg == "halt"):
70
            while True:
71
                print('Raspberry-pi servers are shutting down')
72
                s.sendto(b'raspi_shutdown', (ADDRESS, PORT))
73
                if (get_alivings(s) == 0):
74
                    break
75
                sleep(5)
76
77
        if (msg == "alivings"):
78
           print("Alivings:", get_alivings(s))
79
80 s.close()
81 sys.exit()
82
83 print('Done')
```