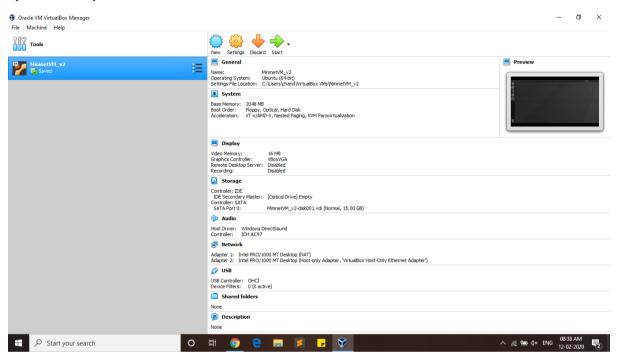# Assignment_4
Name: Chandan Kumar Reddy Mannem
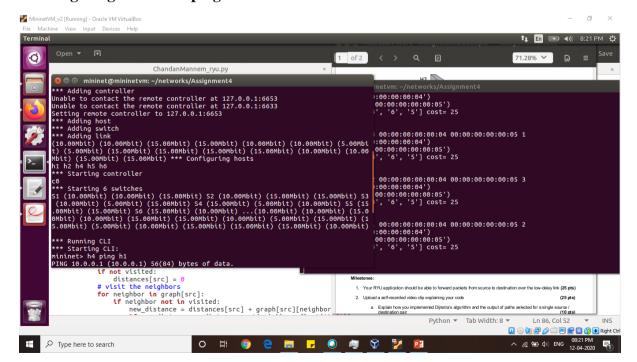# Id   : 801165621
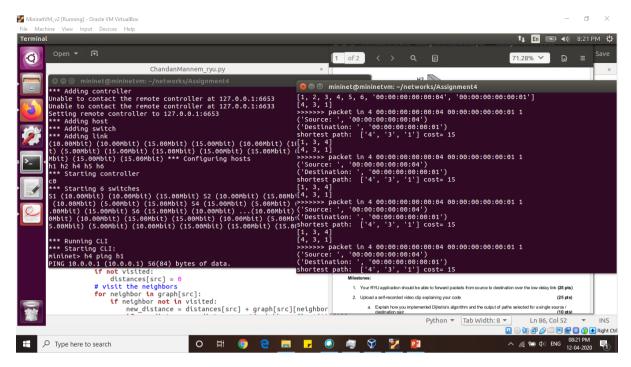# Email: cmannem@uncc.edu

Assigned memory to mininet: 2GB
System OS: Windows
System memory: 4GB

Running Program -> H4 ping H1

H4 ping H5

Terminal

En   8:21 PM

Open ▾

ChandanMannem_ryu.py

1   of 2   ◀   ▶   71.28% ▾   Save

×

mininet@mininetvm: ~/networks/Assignment4

```
c0
*** Starting 6 switches
S1 (10.00Mbit) (10.00Mbit) S2 (10.00Mbit) (15.00Mbi
 (10.00Mbit) (5.00Mbit) (15.00Mbit) S4 (15.00Mbit) (5.00Mbit)
.00Mbit) (15.00Mbit) S6 (15.00Mbit) (10.00Mbit) ...(10.00Mbit)
0Mbit) (10.00Mbit) (15.00Mbit) (15.00Mbit) (10.00Mbit) (5.00Mbi
5.00Mbit) (5.00Mbit) (10.00Mbit) (15.00Mbit) (15.00Mbit) (15.0

*** Running CLI
*** Starting CLI:
mininet> h4 ping h1
PING 10.0.0.1 (10.0.0.1) 56(84) bytes of data.
^C
--- 10.0.0.1 ping statistics ---
19 packets transmitted, 0 received, 100% packet loss, time 184
                                                                
mininet> h4 ping h5
PING 10.0.0.5 (10.0.0.5) 56(84) bytes of data.
^C
--- 10.0.0.5 ping statistics ---
19 packets transmitted, 0 received, 100% packet loss, time 184
                                                                
mininet> exit
*** Stopping network*** Stopping 1 controllers
```

```python
        if not visited:
            distances[src] = 0
        # visit the neighbors
        for neighbor in graph[src]:
            if neighbor not in visited:
                new_distance = distances[src] + graph[src][neighbor
```

mininet@mininetvm: ~/networks/Assignment4

```
('Source: ', '00:00:00:00:00:04')
('Destination: ', '00:00:00:00:00:05')
shortest path:  ['4', '6', '5'] cost= 25
[5, 6, 4]
[4, 6, 5]
>>>>>>> packet in 4 00:00:00:00:00:04 00:00:00:00:00:05 1
('Source: ', '00:00:00:00:00:04')
('Destination: ', '00:00:00:00:00:05')
shortest path:  ['4', '6', '5'] cost= 25
[5, 6, 4]
[4, 6, 5]
>>>>>>> packet in 2 00:00:00:00:00:04 00:00:00:00:00:05 3
('Source: ', '00:00:00:00:00:04')
('Destination: ', '00:00:00:00:00:05')
shortest path:  ['4', '6', '5'] cost= 25
[5, 6, 4]
[4, 6, 5]
>>>>>>> packet in 1 00:00:00:00:00:04 00:00:00:00:00:05 2
('Source: ', '00:00:00:00:00:04')
('Destination: ', '00:00:00:00:00:05')
shortest path:  ['4', '6', '5'] cost= 25
[5, 6, 4]
[4, 6, 5]
```

Milestones:

1. Your RYU application should be able to forward packets from source to destination over the low-delay link (25 pts)
2. Upload a self-recorded video clip explaining your code   (25 pts)
   a. Explain how you implemented Dijkstra's algorithm and the output of paths selected for a single source / destination pair   (10 pts)

Python ▾   Tab Width: 8 ▾   Ln 86, Col 52   INS