User manual for Dijkstra

1. Open the “Dijkstra” folder.

2. Open 7 different terminals in the current path.

3. Execute the following 7 different commands for 7 different terminal (One command for

one terminal):

python router.py A s/r/b

python router.py B s/r/b

python router.py C s/r/b

python router.py D s/r/b

python router.py E s/r/b

python router.py F s/r/b

python router.py G s/r/b

For the last parameter:

- “s” means sending
- “r” means receiving
- “b” means broadcasting

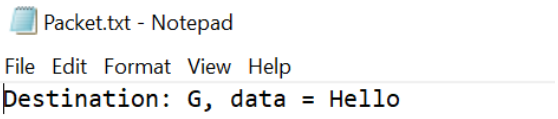
4. If you want to test a router sending single packet to another using the shortest path, then the sender router should be started in “s” mode and all other routers should be started in “r” mode. For testing this case, the packet to be transmitted is taken from “Packet.txt” file. Modify the packet in that file with the destination router’s name.

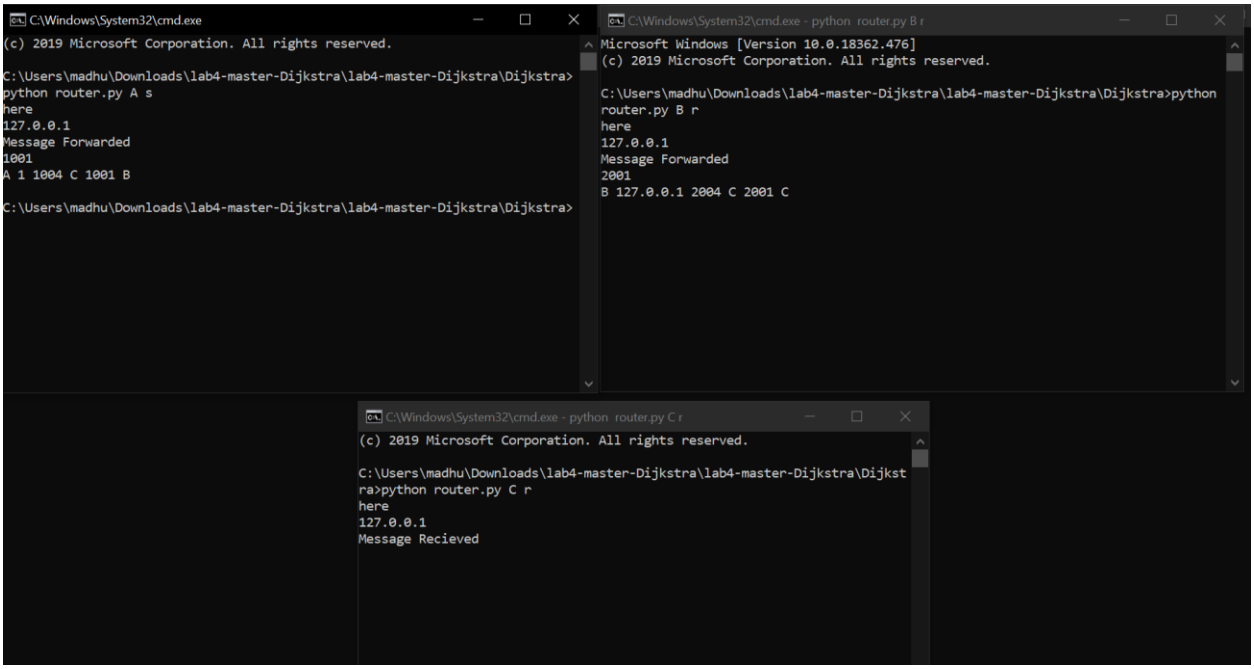
Sender-Receiver Mode:

Here, A is the sender and C is the receiver. A sends packet to C via B, so routers B and C are in receiving mode.

The packet has to be modified as below:

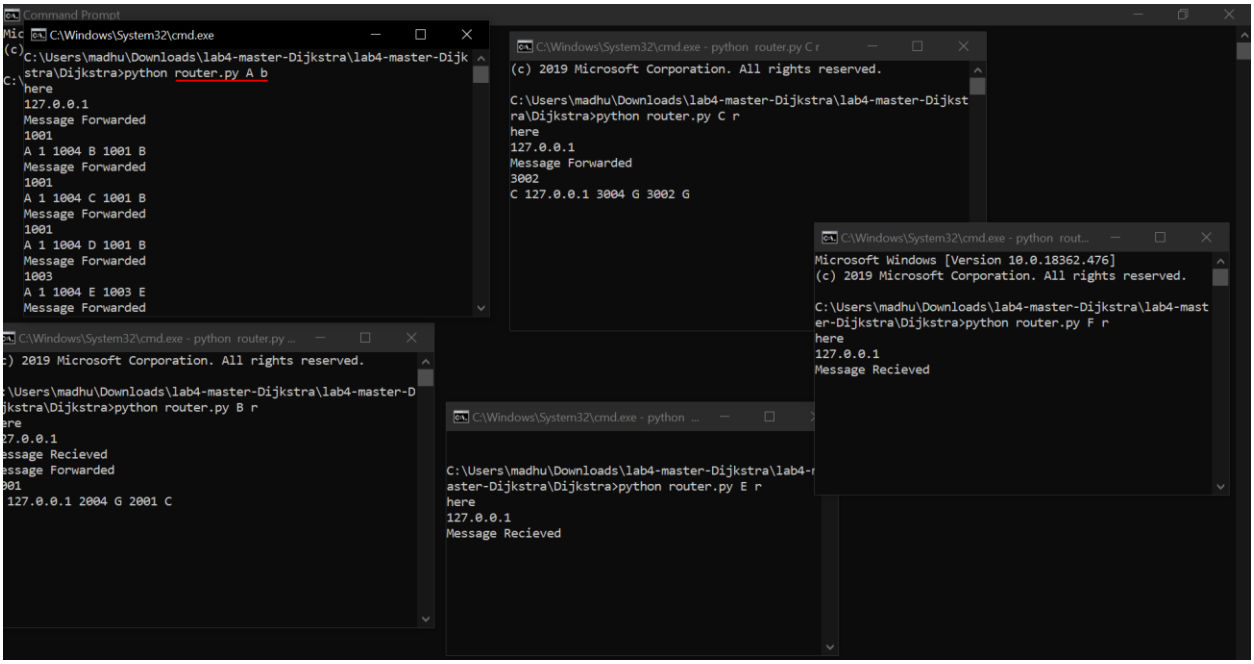
Packet Format:





5. If you want to test the broadcasting part, then router initiating the broadcast should be started in “b” mode and all other routers should be started in “r” mode. No packet modification is required in this case.

Broadcast Mode:



6. After execution of the above, we can open and see the log files (log_A.txt, log_B.txt, log_C.txt, log_D.txt,log_E.txt, log_F.txt, log_G.txt) for the expected outputs.