COSC 350   Assignment 3   Fall 2024
Due December 5.
Submit only two Java source code .java files (not jar files): the Java source code for the server named
Groupnameserver.java and the Java source code for the client named Groupnameclient.java. Replace Groupname
by your group name.

Write a <u>TCP Java client/server socket program</u> that does the following:
Assume that router R1 is the localhost client and router R2 is the localhost server that listens on port 12121. R1
and R2 are directly connected by a link with cost 0. The current routing table of R2 is shown below. R2 now gets a
DVR message shown below from R1 over TCP on port 12121. R2 then uses the distance-vector routing (DVR)
algorithm to update its routing table. Print R2's original routing table before updating and R2's updated routing
table after receiving R1's DVR message and using the DVR algorithm to update. The routing tables of routers R1
and R3 are not needed.

<u>R2's Routing Table</u>

destination network	cost	next hop
1.2.3.0	4	R3
1.2.4.0	8	R1

<u>R1's DVR message to R2</u>

destination network	cost
1.2.3.0	2
1.2.4.0	10
1.2.5.0	5