Q. HOW TO CONNECT THE PC'S WHOSE NETWORK ID'S ARE (192.168.1.10),(192.168.1.11),(192.168.2.10),(192.168.2.11),(192.168.3.10), (192.168.3.11) BY USING THE ROUTING INFORMATION PROTOCOLS IN DYNAMIC ROUTING IN CISCO PACKET TRACER?

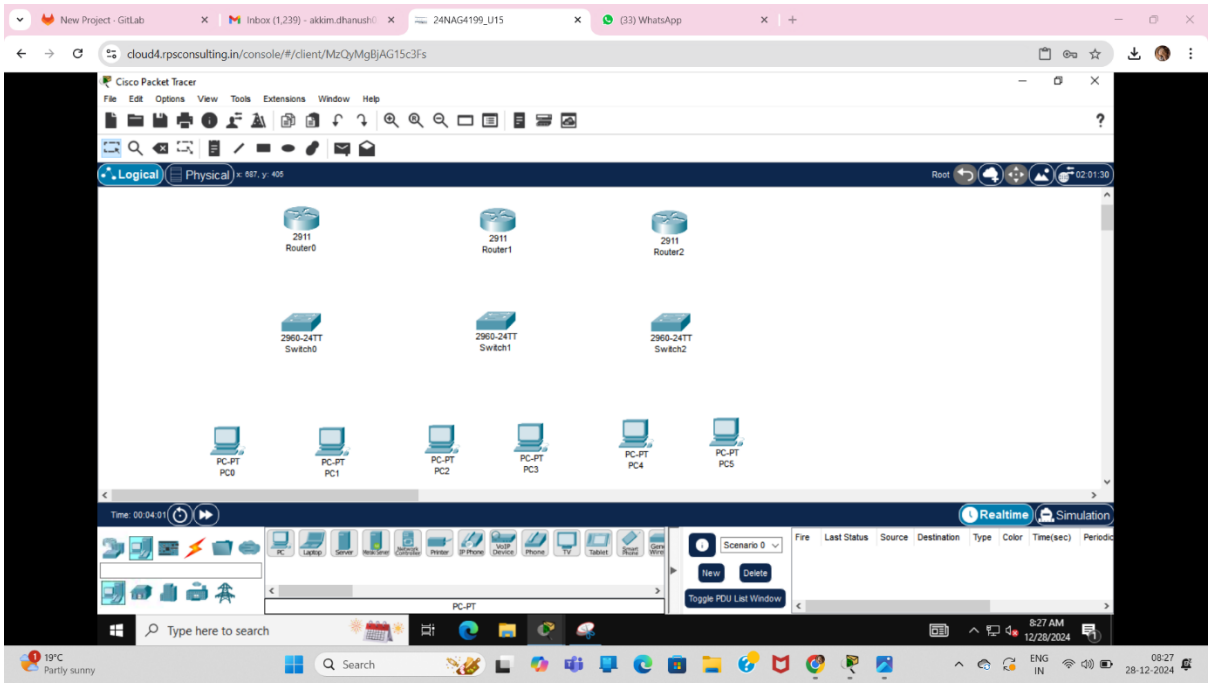
ANSWER :

STEP - 1: OPEN THE CISCO PACKET TRACER BY DOUBLE CLICKING THE APP.

STEP -2: SELECT THE PC SYMBOL AND PASTE THE PC'S AS WE REQUIRED, WE TAKE THEM AS PC0,PC1,PC2,PC3,PC4,PC5.

NOW TO CONNECT THE PC'S WE USE THE 2960 SWITCHES OF 3 AS SWITCH 0, SWITCH 1, SWITCH 2.

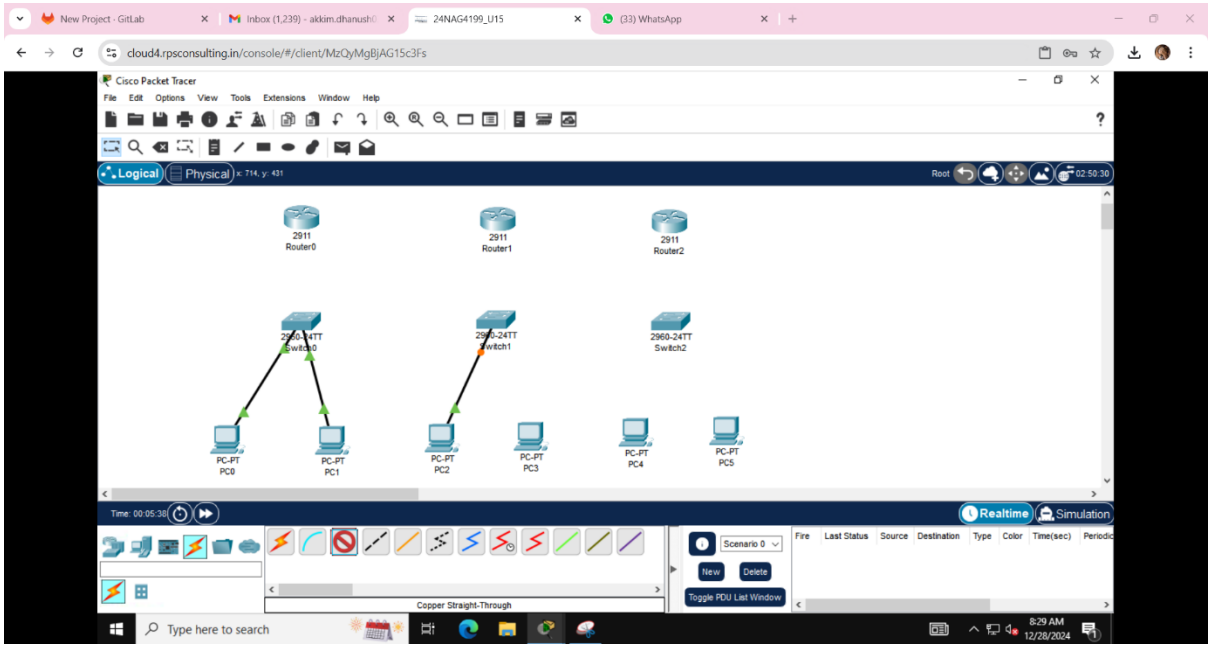
AND WE USE 2911 ROUTERS OF 3 TO CONNECT THE NETWORK BETWEEN THE SWITCHES.



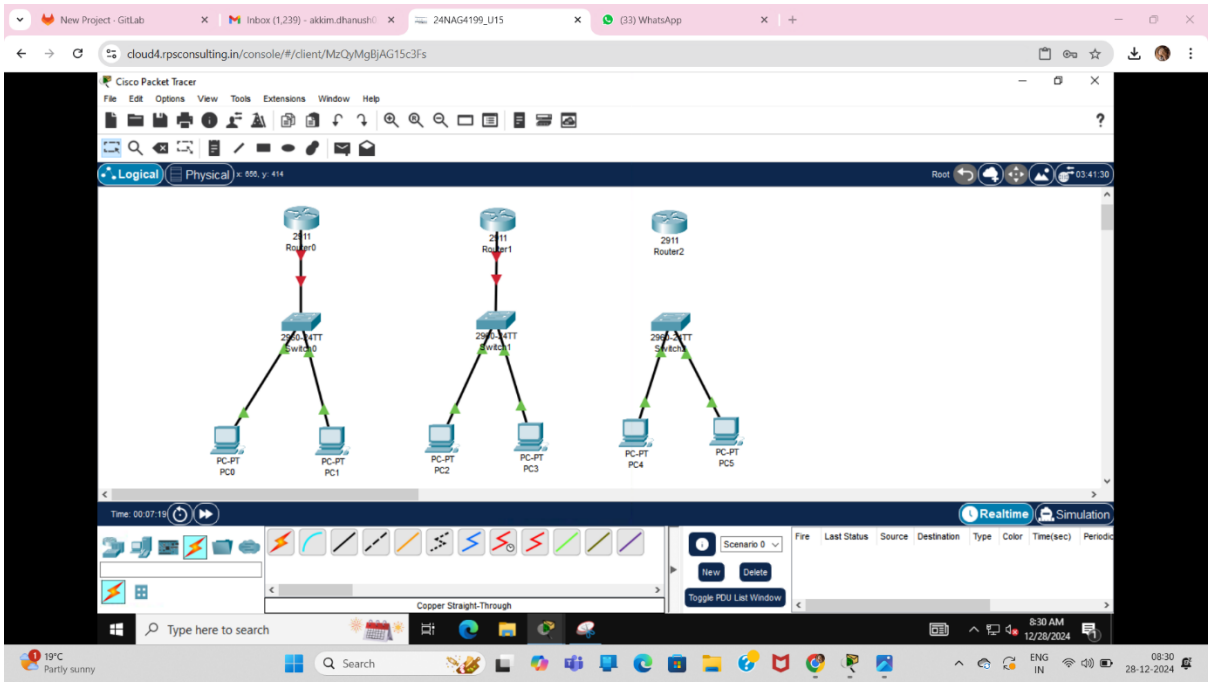
STEP -3: BY CLICKING THE CONNECTION SYMBOL ⚡ , WE USE COPPER STRAIGHT CONNECTION TO

WIPRO ASSIGNMENT - 2

CONNECT THE NETWORKS BETWEEN PC'S TO SWITCHES.

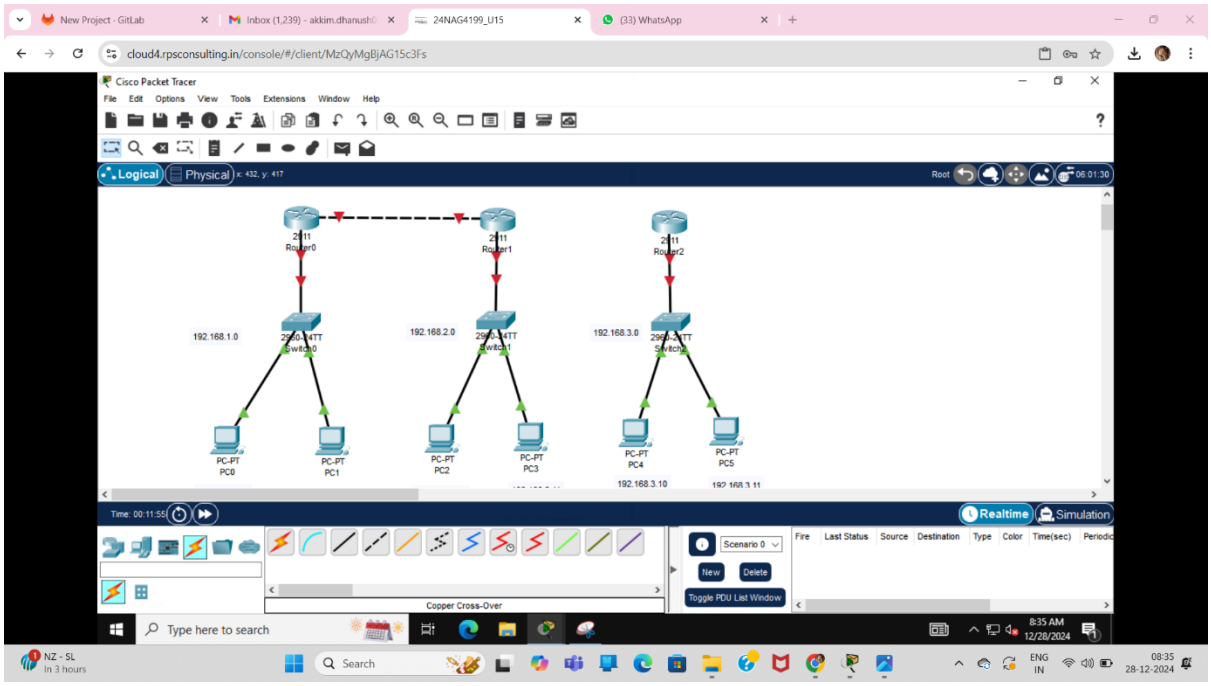


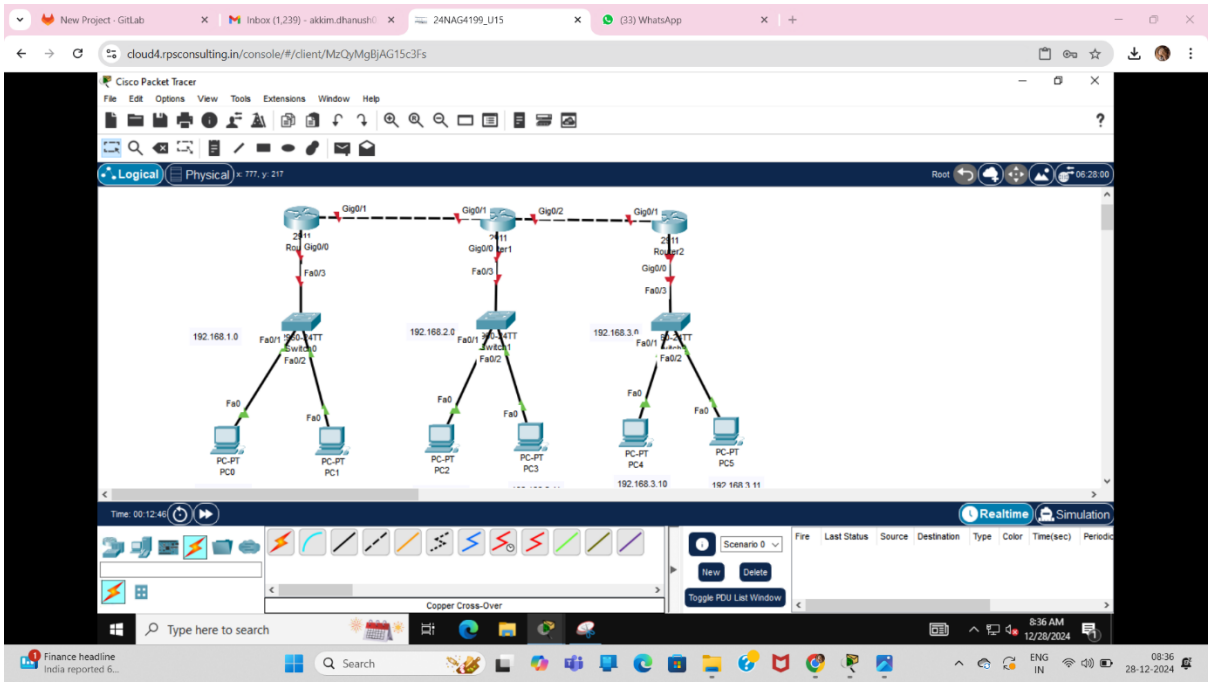
NOW, WE CONNECT THE SWITCHES TO THE ROUTERS BY USING THE SAME CONNECTION.



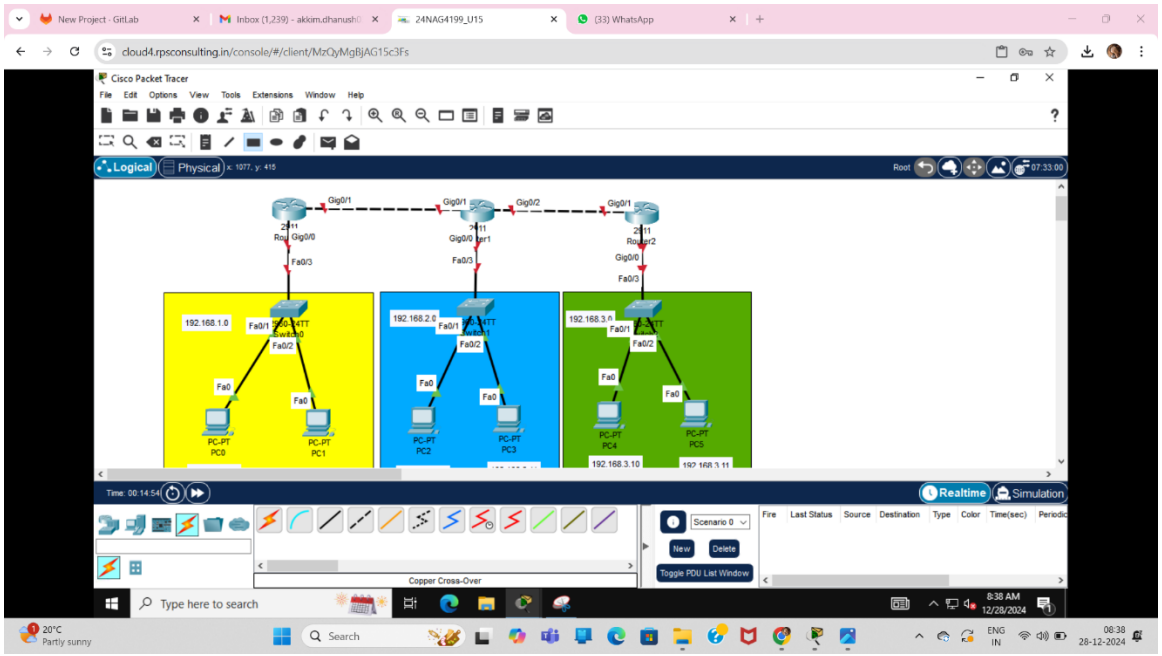
STEP -4: NOW, WE CONNECT THE ROUTERS BY USING THE COPPER CROSS OVER.

WIPRO ASSIGNMENT - 2





WE CAN EDIT THE PCS , SWITCHES AND ROUTERS WITH THE SHAPES AND COLOURS AS WE WANT. SO, WE CAN EASILY IDENTIFY THE SEPARATE NETWOTKS AS SHOWN IN THE BELOW PICTURE.

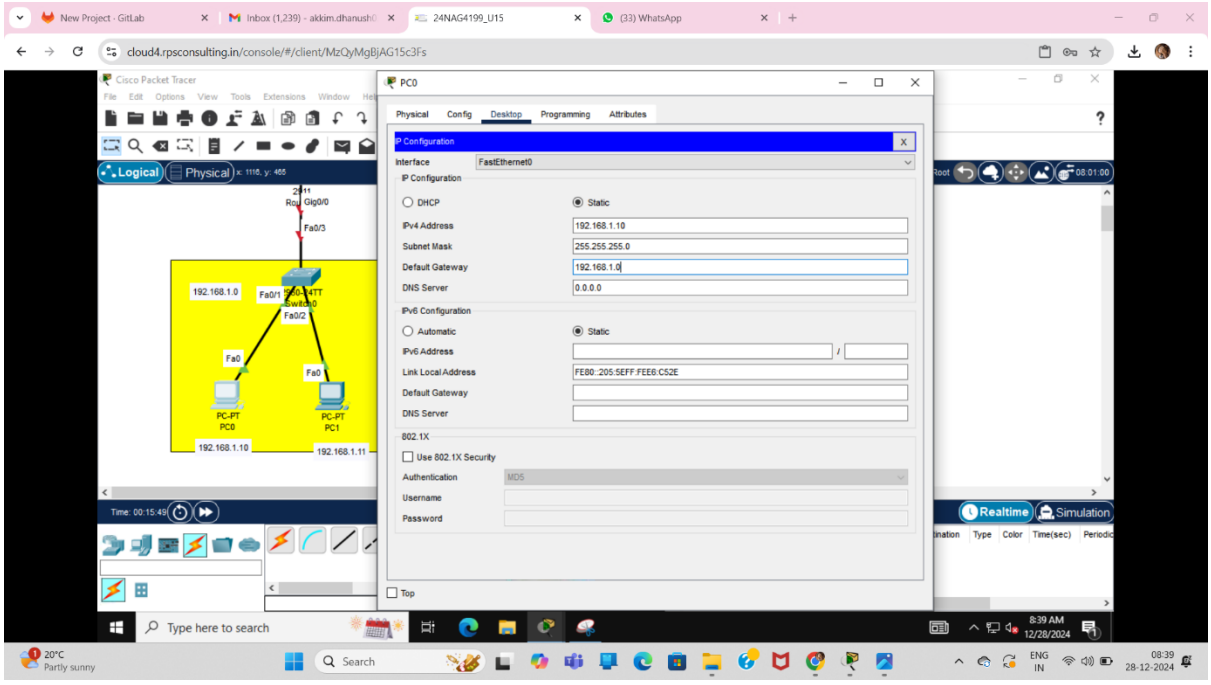


STEP -5: WE HAVE TO GIVE THE IP ADDRESSES TO THE EACH PC.

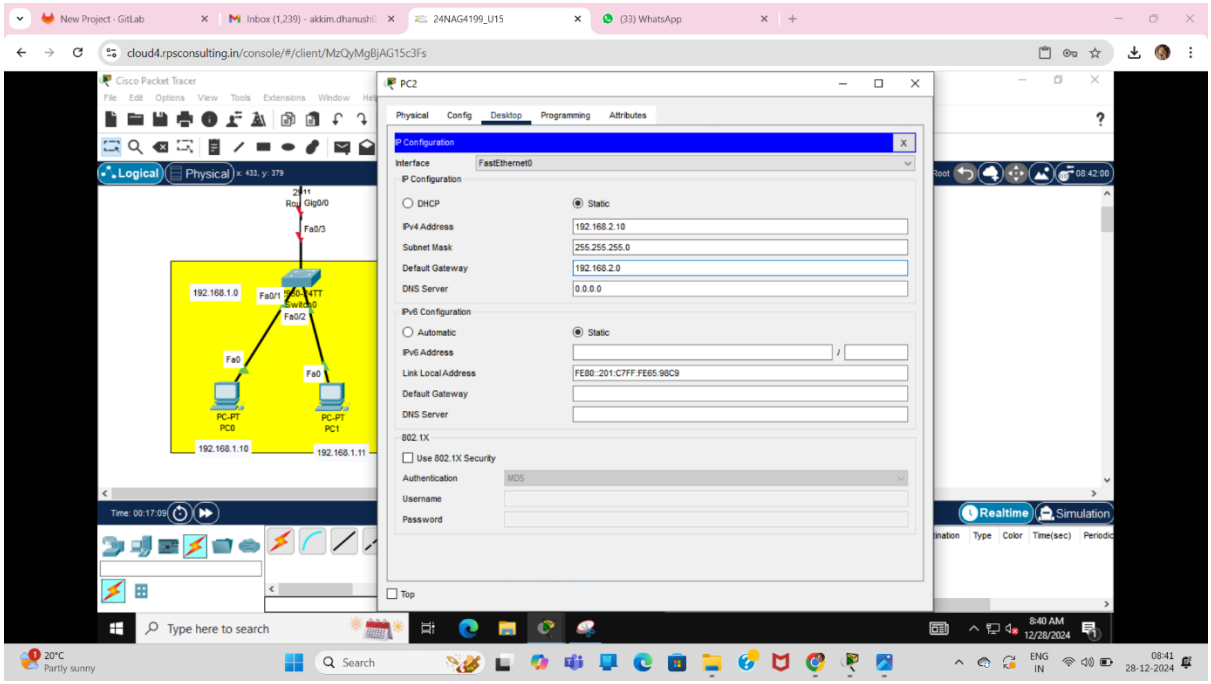
DOUBLE CLICK ON PC'S, SELECT THE DESKTOP OPTION AND GIVE THE IP ADDRESS AND CLICK ON TAB, IT AUTOMATICALLY TAKES THE SUBNET MASK OF THE NETWORK.

SIMILARLY, DO THE SAME PROCESS AS OTHER PC'S.

PC0 – 192.168.1.10, PC1 – 192.168.1.11,

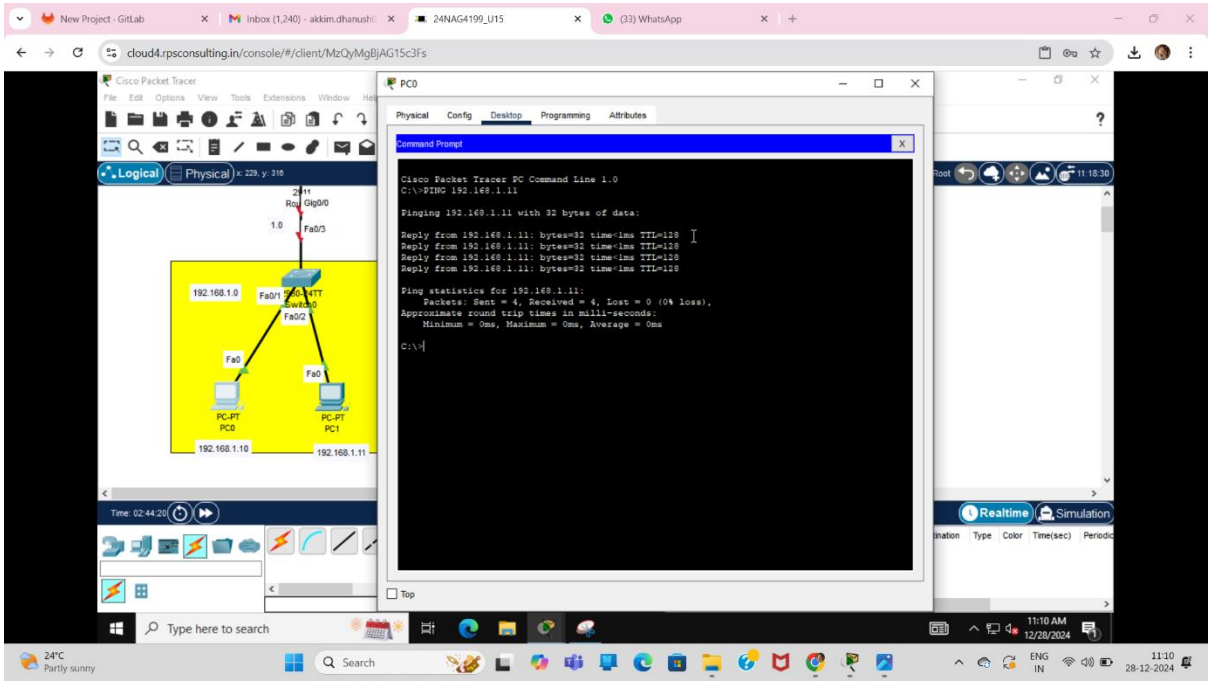


PC2 – 192.168.2.10, PC3 – 172.17.2.11 AS SHOWN BELOW,



PC4 – 192.168.3.10, PC5 – 192.168.3.11.

STEP -6: NOW, WE CAN PING FROM PC0 TO PC1 AND PC1 TO PC0,



SIMILARLY, WE CAN PING FROM PC2 TO PC3 AND PC3 TO PC2

ALSO, FROM PC4 TO PC5.

BUT OUR TARGET IS TO PING FROM PC0 TO PC5,PC2,PC3,PC4.

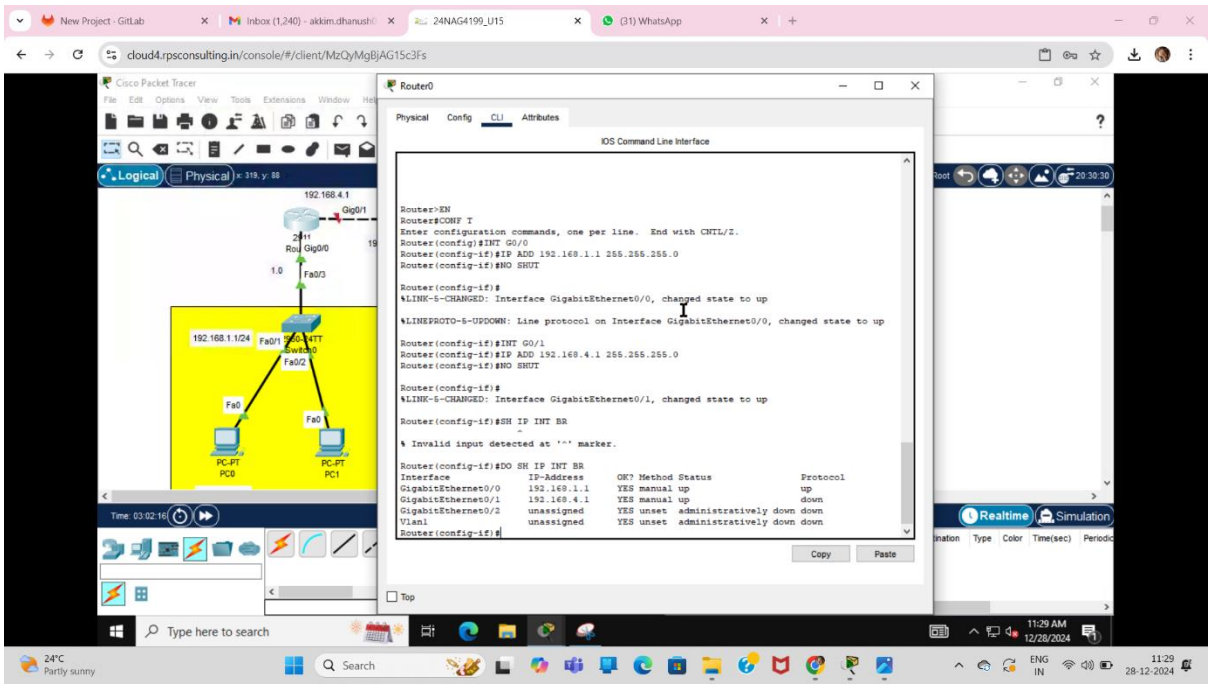
STEP -7: DOUBLE CLICK ON ROUTER 0 AND GO TO CLI AND PRESS ENTER.

GIVE THE COMMAND AS EN/ENABLE TO GO THE PRIVILIGED MODE,

NOW TO GO TO THE GLOBAL CONFIGURATION MODE WE USE CONF T.

GIVE THE INT G0/0 AS IP ADDRESS AS 192.168.1.1 WITH SUBNET MASK 255.255.255.0

NOW, GIVE “NO SHUT” COMMAND TO TURN ON THE CONNECTION UP BETWEEN THE ROUTER 0 AND SWITCH 0.



SIMILARLY, GIVE THE “INT G0/1” COMMAND AND PRESS ENTER THEN GIVE THE IP ADDRESS AS 192.168.4.1 WHOSE SUBNET MASK IS 255.255.255.0 AND GIVE “NO SHUT” COMMAND TO TURN THE CONNECTION UP BETWEEN THE ROUTER 0 AND ROUTER 1.

STEP -8: CLICK ON ROUTER 1 AND GO TO CLI AND PRESS ENTER.

GIVE THE COMMAND AS “EN/ENABLE” TO GO THE PRIVILIGED MODE,

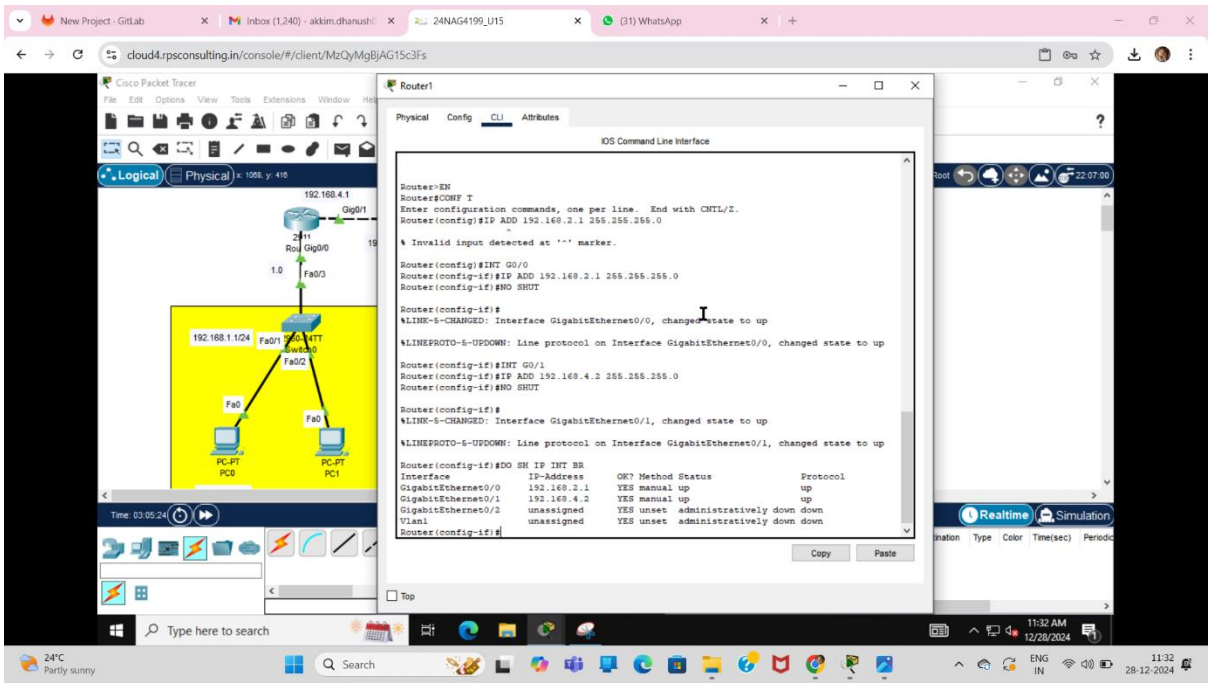
NOW TO GO TO THE GLOBAL CONFIGURATION MODE WE USE “CONF T”.

GIVE THE “INT G0/0” AS IP ADDRESS AS 192.168.2.1 WITH SUBNET MASK 255.255.255.0

NOW, GIVE “NO SHUT COMMAND” TO TURN ON THE CONNECTION UP BETWEEN THE ROUTER 1 AND SWITCH 1.

SIMILARLY, GIVE THE “INT G0/1” COMMAND AND PRESS ENTER THEN GIVE THE IP ADDRESS AS 192.168.4.1 WHOSE SUBNET MASK IS 255.255.255.0 AND GIVE “NO SHUT” COMMAND TO TURN ON THE CONNECTION UP BETWEEN THE ROUTER 1 AND ROUTER 0.

SIMILARLY, GIVE THE INT G0/2 COMMAND AND PRESS ENTER THEN GIVE THE IP ADDRESS AS 192.168.5.1 WHOSE SUBNET MASK IS 255.255.255.0 AND GIVE NO SHUT COMMAND TO TURN ON THE CONNECTION UP BETWEEN THE ROUTER 1 AND ROUTER 2.



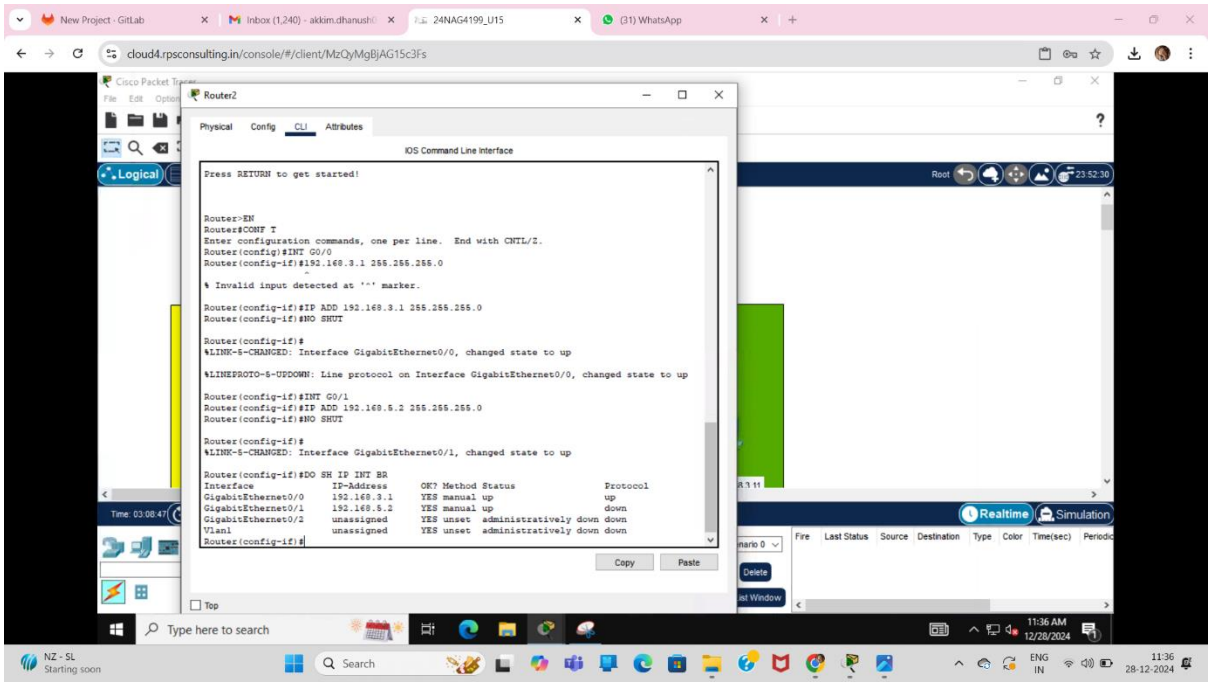
STEP -9: CLICK ON ROUTER 2 AND GO TO CLI AND PRESS ENTER.

GIVE THE COMMAND AS ”EN/ENABLE” TO GO THE PRIVILIGED MODE,

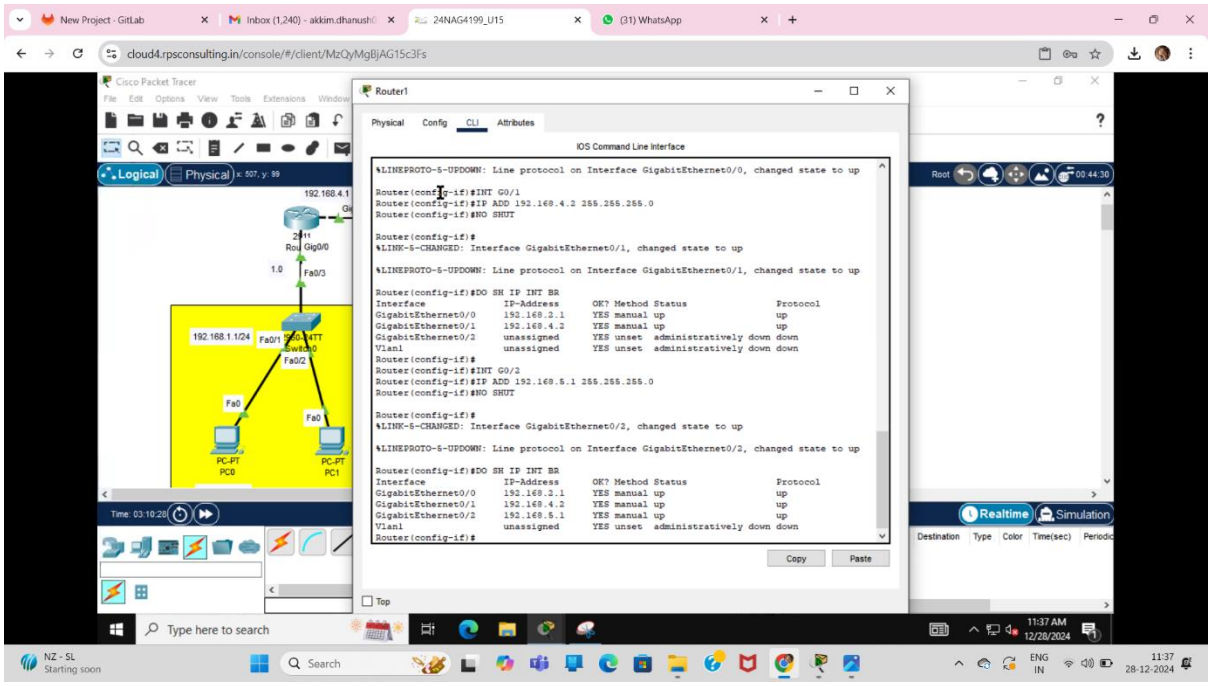
NOW TO GO TO THE GLOBAL CONFIGURATION MODE WE USE ”CONF T”.

GIVE THE “INT G0/0” AS IP ADDRESS AS 192.168.3.1 WITH SUBNET MASK 255.255.255.0

NOW, GIVE “NO SHUT” COMMAND TO TURN ON THE CONNECTION UP BETWEEN THE ROUTER 2 AND SWITCH 2.



SIMILARLY, GIVE THE “INT G0/1” COMMAND AND PRESS ENTER THEN GIVE THE IP ADDRESS AS 192.168.5.2 WHOSE SUBNET MASK IS 255.255.255.0 AND GIVE “NO SHUT” COMMAND TO TURN ON THE CONNECTION UP BETWEEN THE ROUTER 2 AND ROUTER 1.



AND WE SHOULD GIVE THE DEFAULT GATE WAY FOR THE PCS.

FOR PC0 AND PC1 THE DEFAULT GATE WAY IS 192.168.1.1 AND FOR PC2 AND PC3 THE DEFAULT GATE WAY IS 192.168.2.1 AND FOR PC4,PC5 THE DEFAULT GATE WAY IS 192.168.3.1.

NOW WE CAN SEE THAT ALL THE PHYSICAL CONNECTIONS OF THE PCS,SWITCHES AND THE ROUTERS ARE CONNECTED SUCCESSFULLY.BUT IF WE TRY TO PING IT FAILS.

STEP -10: NOW WE USE THE COMMAND AS “RIP” WHICH MEANS ROUTING INFORMATION PROTOCOL.

PRACTICALLY THE COMMAND FUNCTIONS WE USE IN THIS DYNAMATIC RIP METHOD WILL BE

ROUTER RIP

VERSION 2

NO AUTO SUMMARY

NETWORK IP ADDRESS.

FOR ROUTER 0 WE HAVE TO CONNECT THE NETWORKS BY USING THESE COMMANDS:

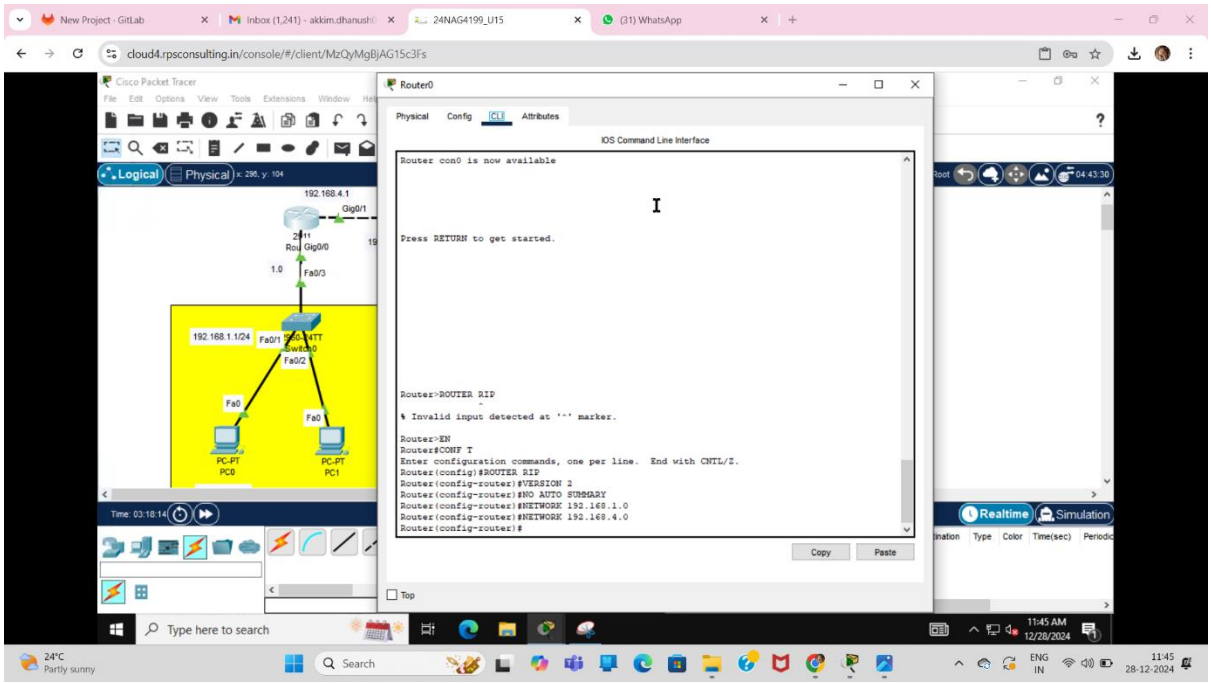
ROUTER RIP

VERSION 2

NO AUTO SUMMARY

NETWORK 192.168.1.0

NETWORK 192.168.4.0.



FOR ROUTER 1 WE HAVE TO CONNECT THE NETWORKS BY USING THESE COMMANDS:

ROUTER RIP

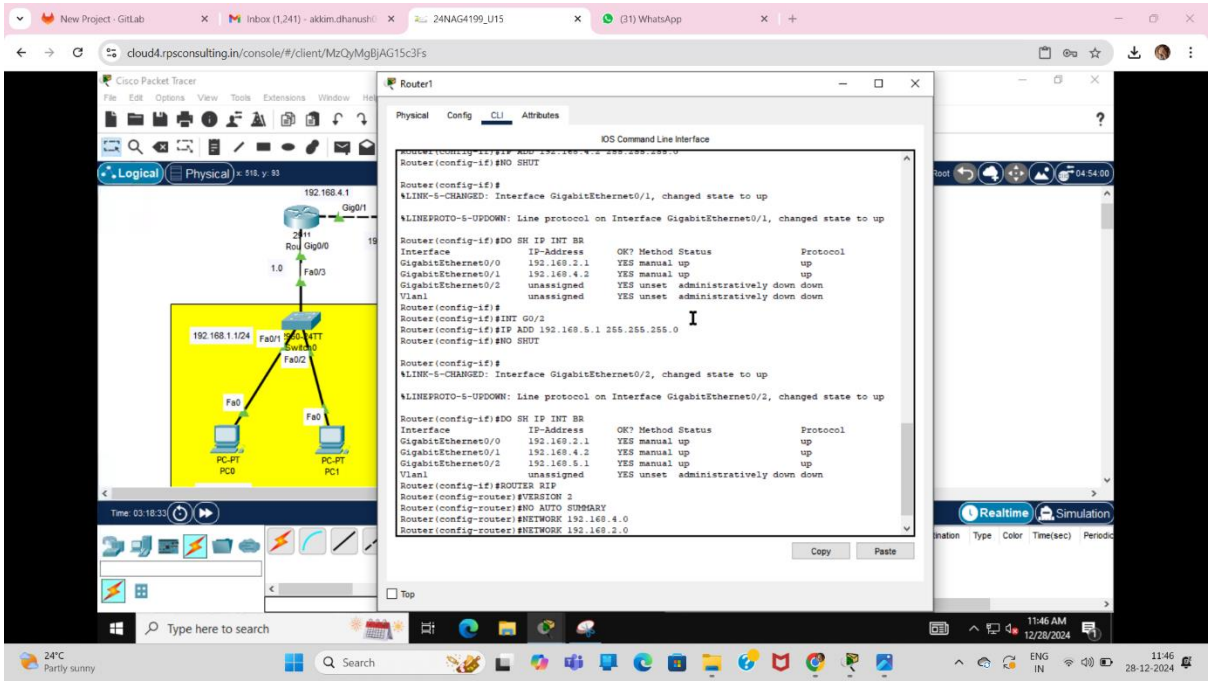
VERSION 2

NO AUTO SUMMARY

NETWORK 192.168.5.0

NETWORK 192.168.4.0

NETWORK 192.168.2.0



FOR ROUTER 2 WE HAVE TO CONNECT THE NETWORKS BY USING THESE COMMANDS:

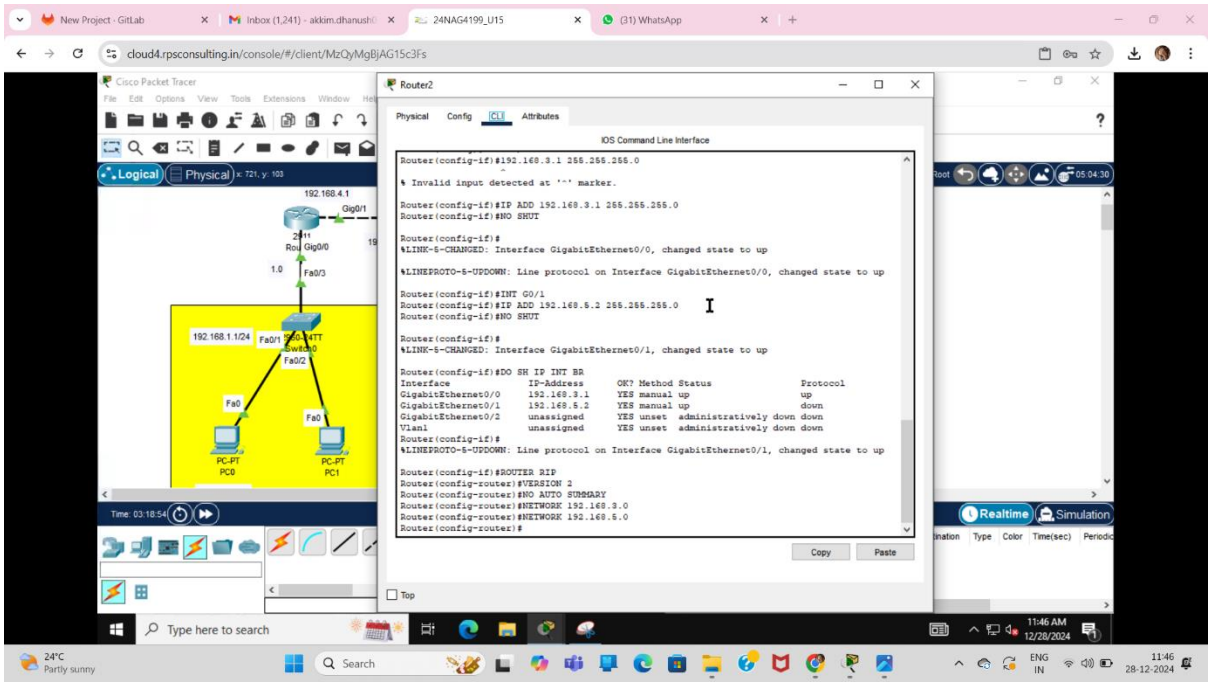
ROUTER RIP

VERSION 2

NO AUTO SUMMARY

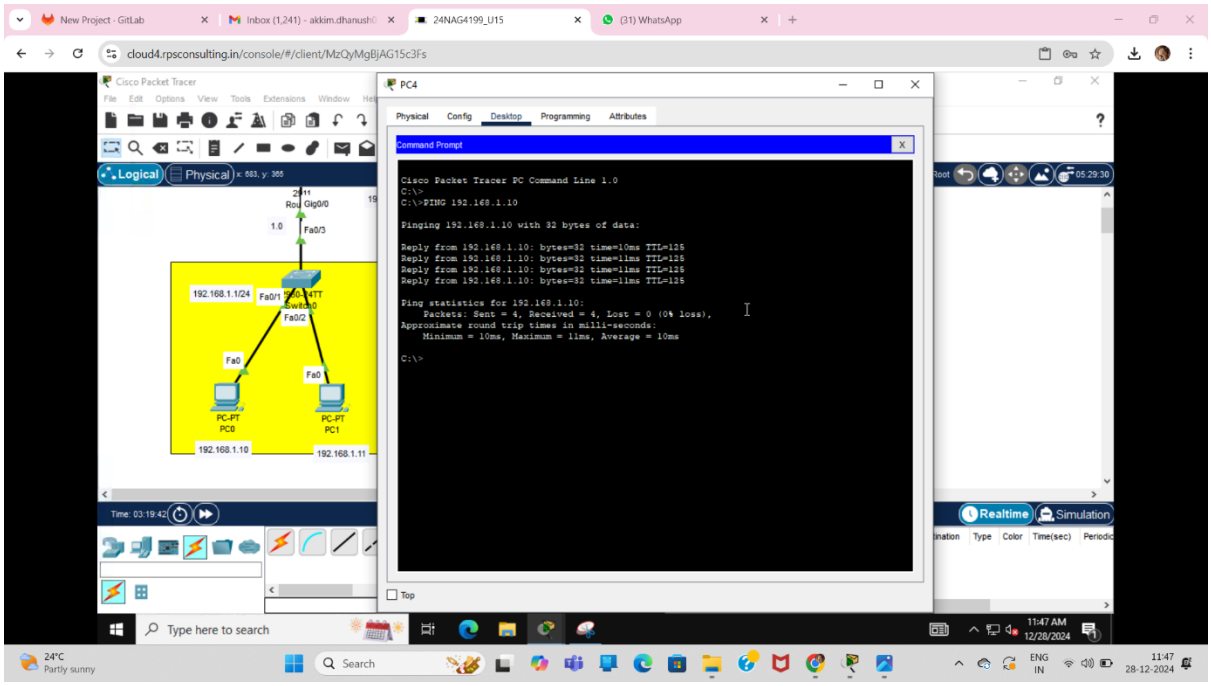
NETWORK 192.168.5.0

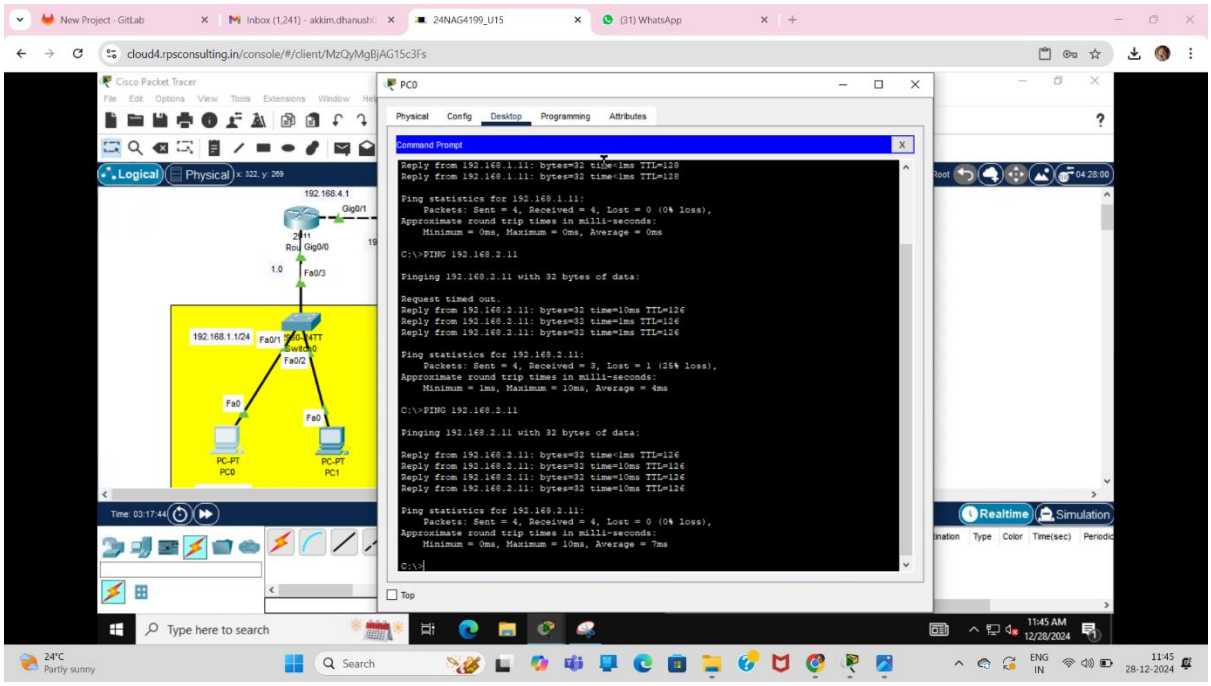
NETWORK 192.168.3.0



AS SHOWN IN THE ABOVE PICTURE.

STEP -11: NOW WE CAN SEE THE PCS ARE PINGING EACH OTHER





HENCE, WE CAN PING THE MESSAGE FROM ANY OF THE PC TO ANY OF THEM.

**********THANK YOU**********