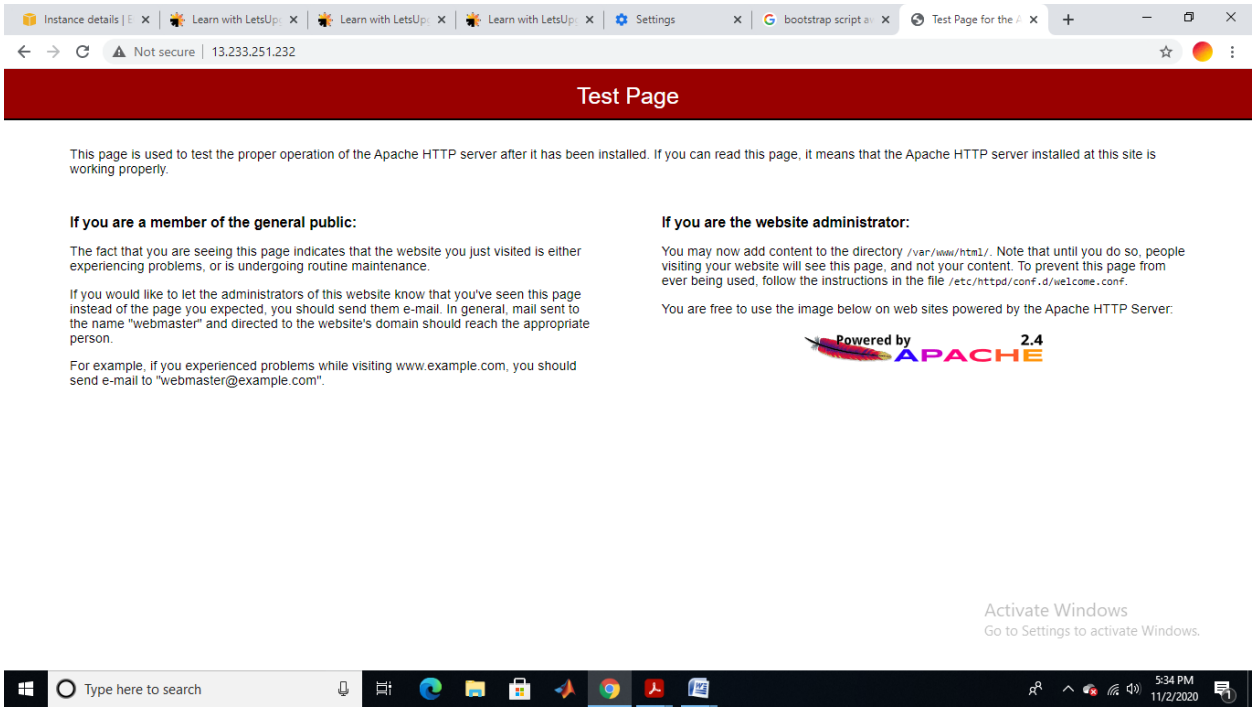
IAM ROLES WITH S3 AND BOOTSTRAPPING WITH EC2

BOOTSTRAPPING ALLOWS US TO WRITE AND PUT SCRIPT ON STARTUP WHILE LAUNCHING AN EC2 INSTANCE SO THAT IT EXECUTES AUTOMATICALLY AS SOON AS THE INSTANCE IS LAUNCHED.

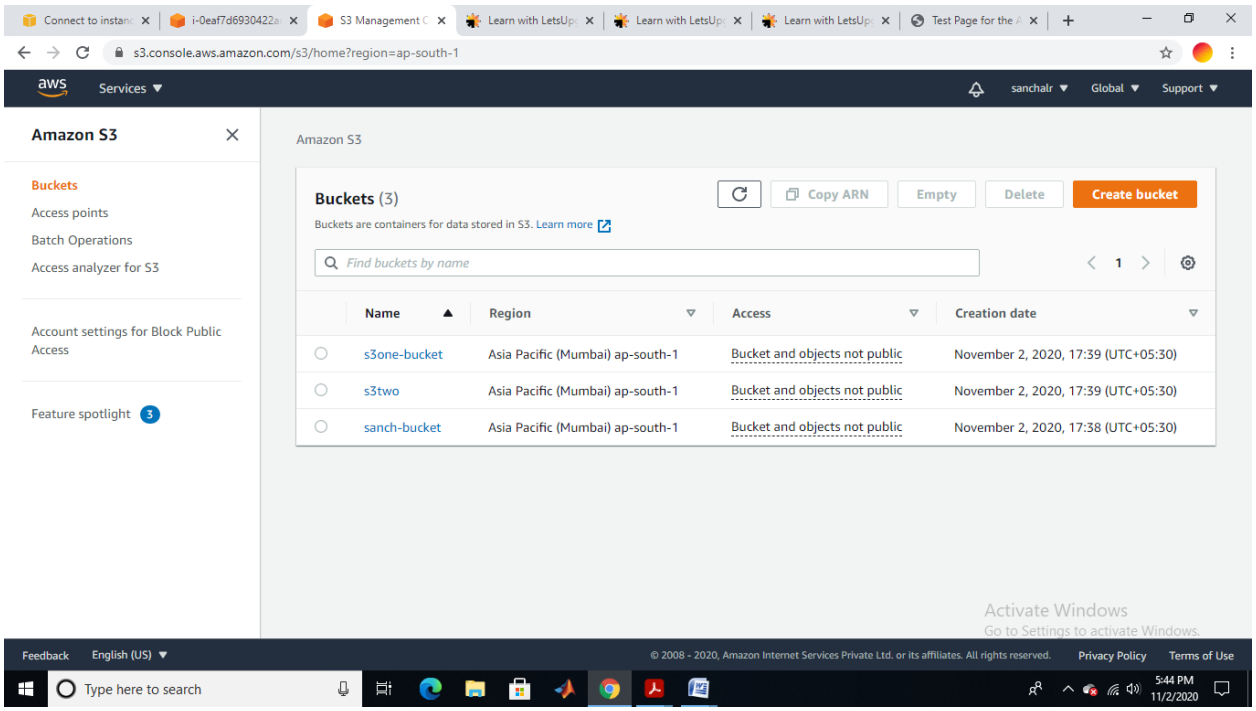
TASK1: CREATING A BOOTSTRAPPED INSTANCE

HERE, A BOOTSCRAP SCRIPT TO INSTALL APACHE HTTPD IS WRITTEN IN THE CONFIGURE INSTANCE DETAILS SECTION IN THE USER DATA ALTERNATIVE.



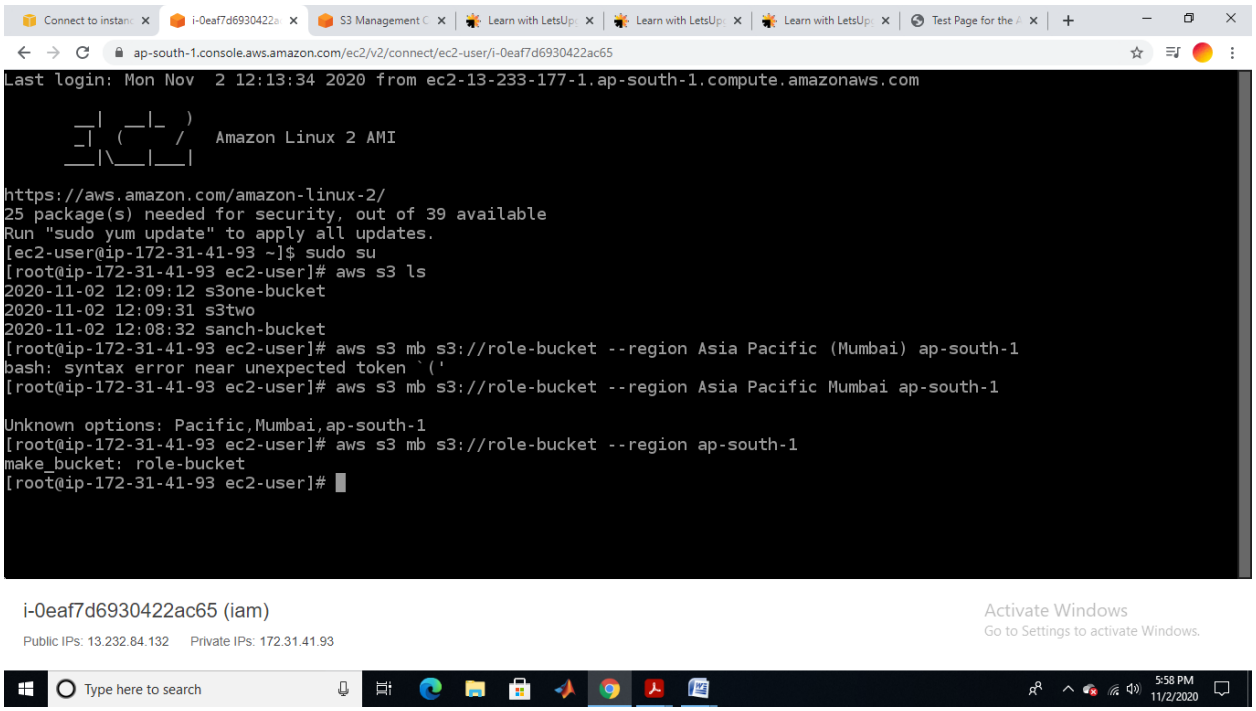
TASK 2: CHECKING BUCKET LIST AND CREATING A NEW BUCKET FROM EC2 USING IAM ROLES

ANY NUMBER OF BUCKETS CAN BE CREATED IN S3 AND HERE WE HAVE CREATED 3 BUCKETS AND LISTED THEM ACCORDINGLY.BY DEFAULT, 100 BUCKETS CAN BE CREATED PER ACCOUNT AND LIMIT CAN BE INCREASED UPTO 1000 BY SUBMITTING A SERVICE LIMIT INCREASE.



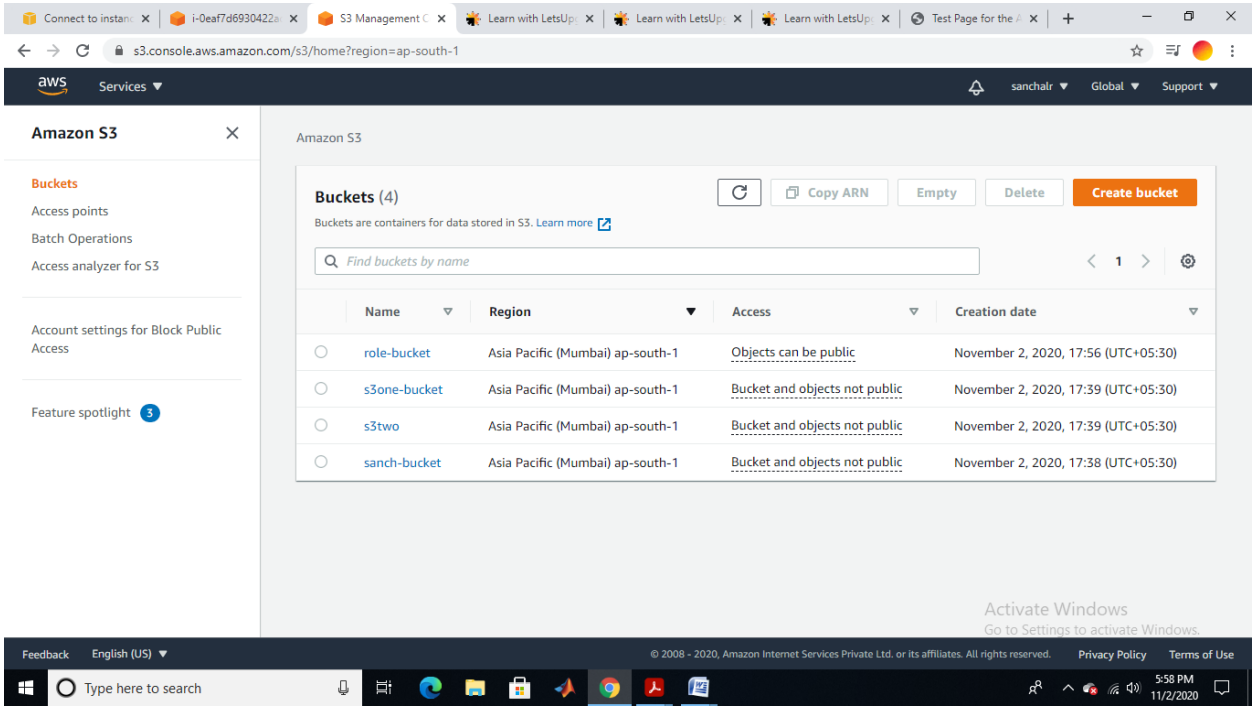
LISTING S3 BUCKETS AND CREATING A NEW BUCKET

BUCKETS ARE LISTED USING COMMAND {AWS S3 LS} AND NEW BUCKET IS CREATED USING COMMAND {AWS S3 MB S3:// REGION(IF WANT ANOTHER REGION) AND NEW BUCKET NAME}.

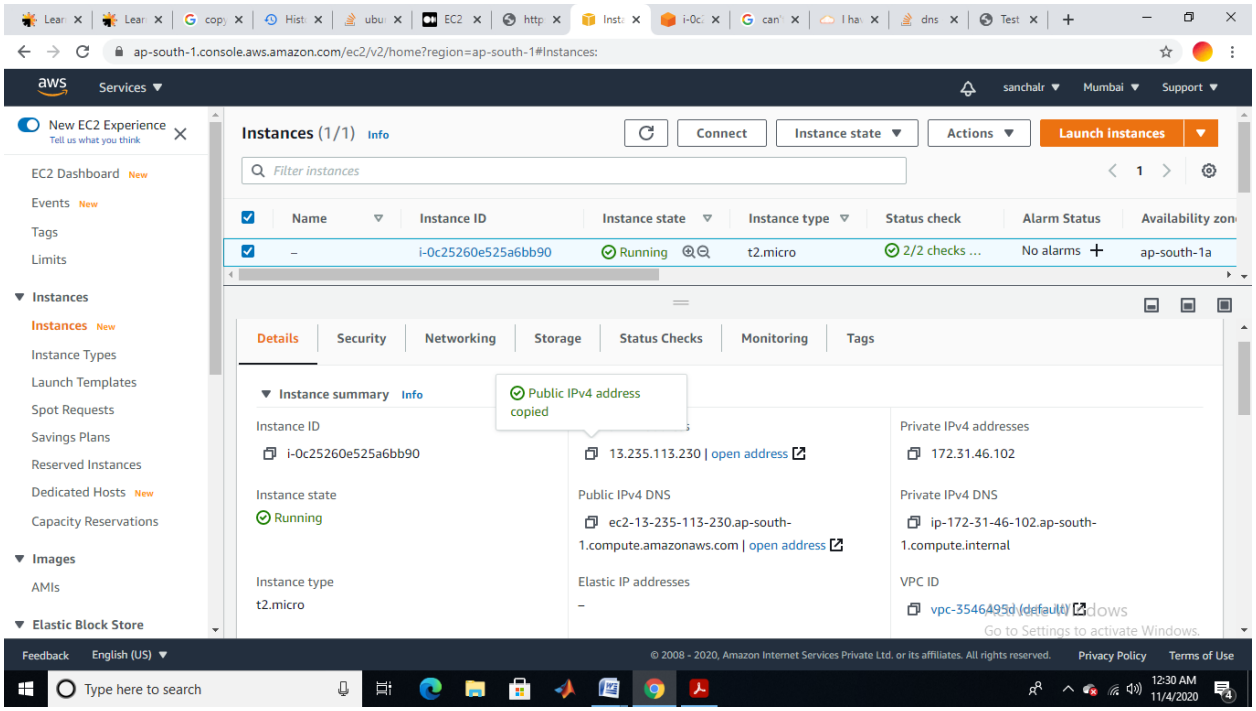


VERIFIED IN S3 CONSOLE

CREATION OF NEW BUCKET NAMED ROLE-BUCKET

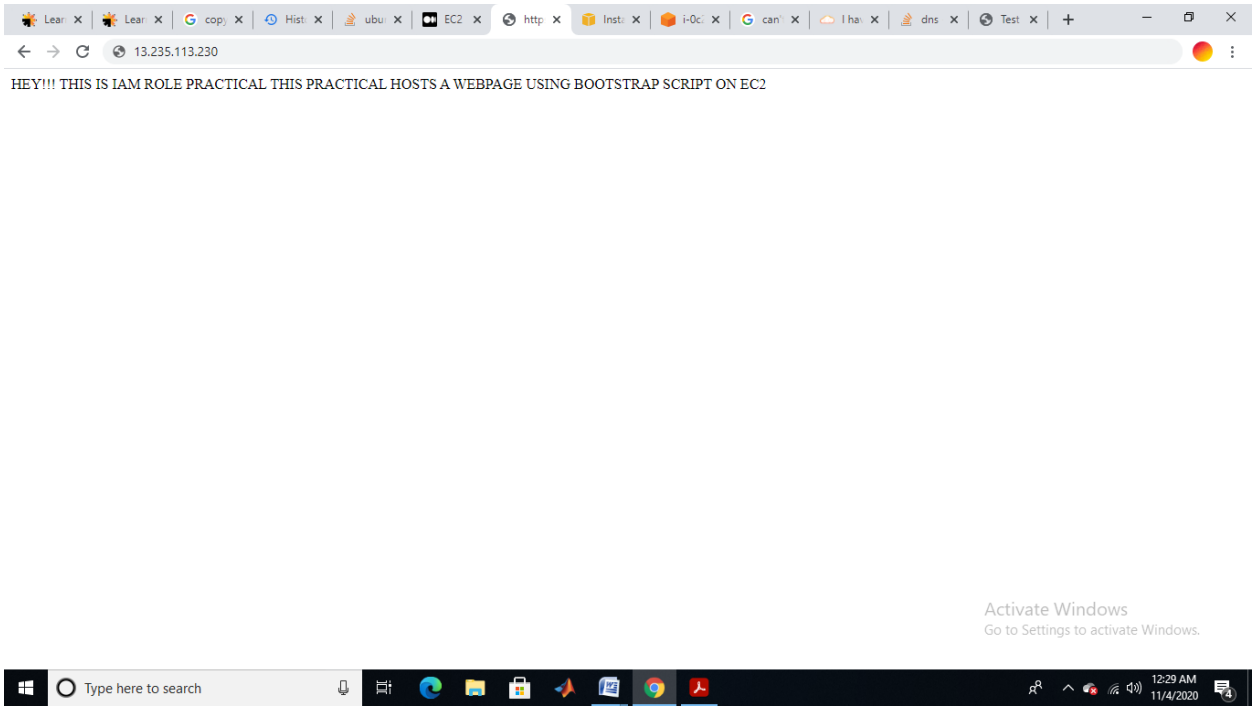


TASK 3: HOSTING A WEBPAGE USING THE BOOTSTRAP SCRIPT ON EC2.



HTML FILE DISPLAYED

IAM.HTML FILE WAS CREATED AND COPIED IN EC2 INSTANCE.

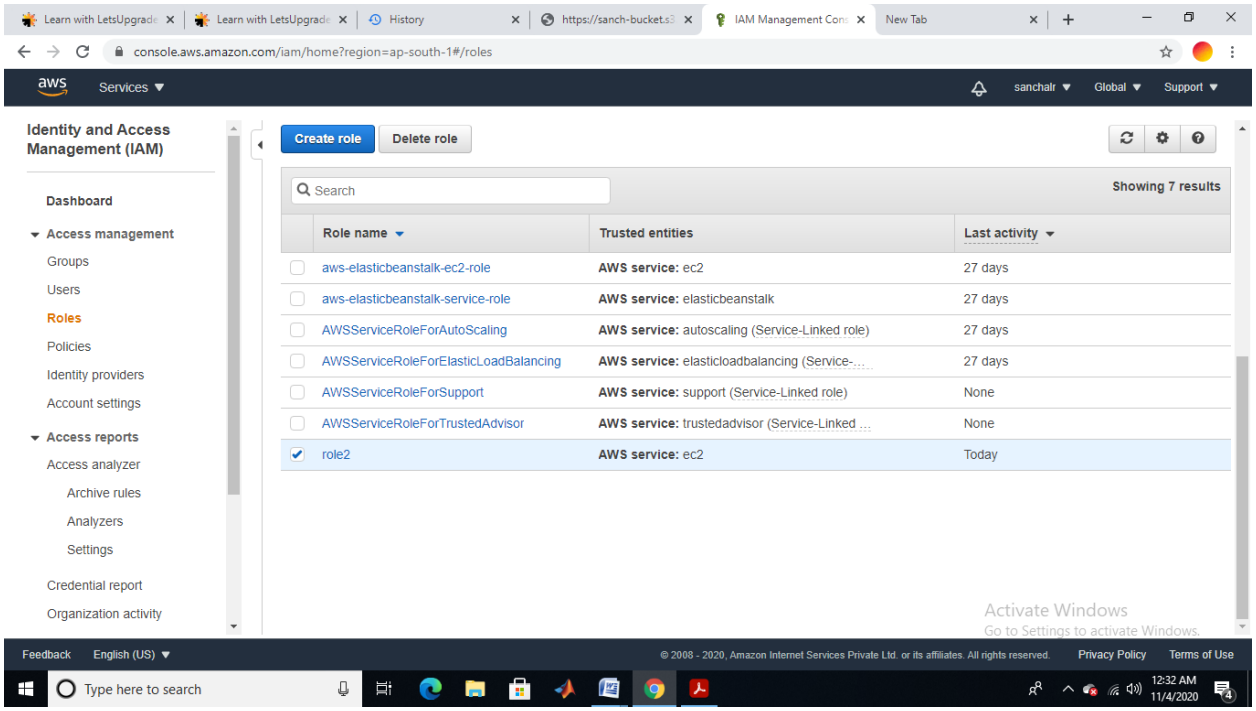


IAM CREATED NAMED ROLE2

ROLE DOES NT HAVE USERNAME AND PASSWORD. IT IS AN IDENTITY WITH PERMISSION POLICIES THAT DETERMINE WHAT THE IDENTITY CAN AND CANNOT DO IN AWS.

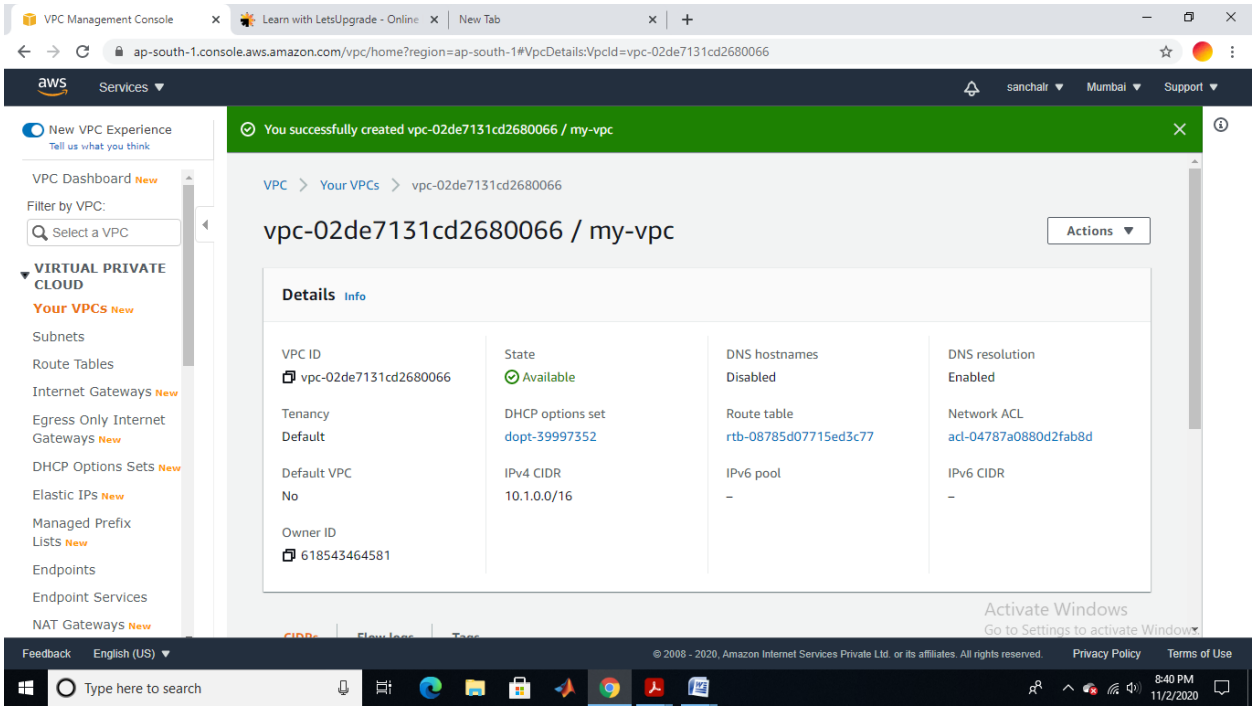
ROLE CREATED IS ADDED TO INSTANCE.

ROLE CAN BE ASSIGNED TO DIFFERENT TRUSTED ENTITY AS ANOTHER AWS ACCOUNT, WEB IDENTITY, SAML FEDERATION AND USE CASES LIKE EC2 OR LAMBDA. HERE WE ARE USING EC2 AS TRUSTED ENTITY AND EC2 USE CASE.

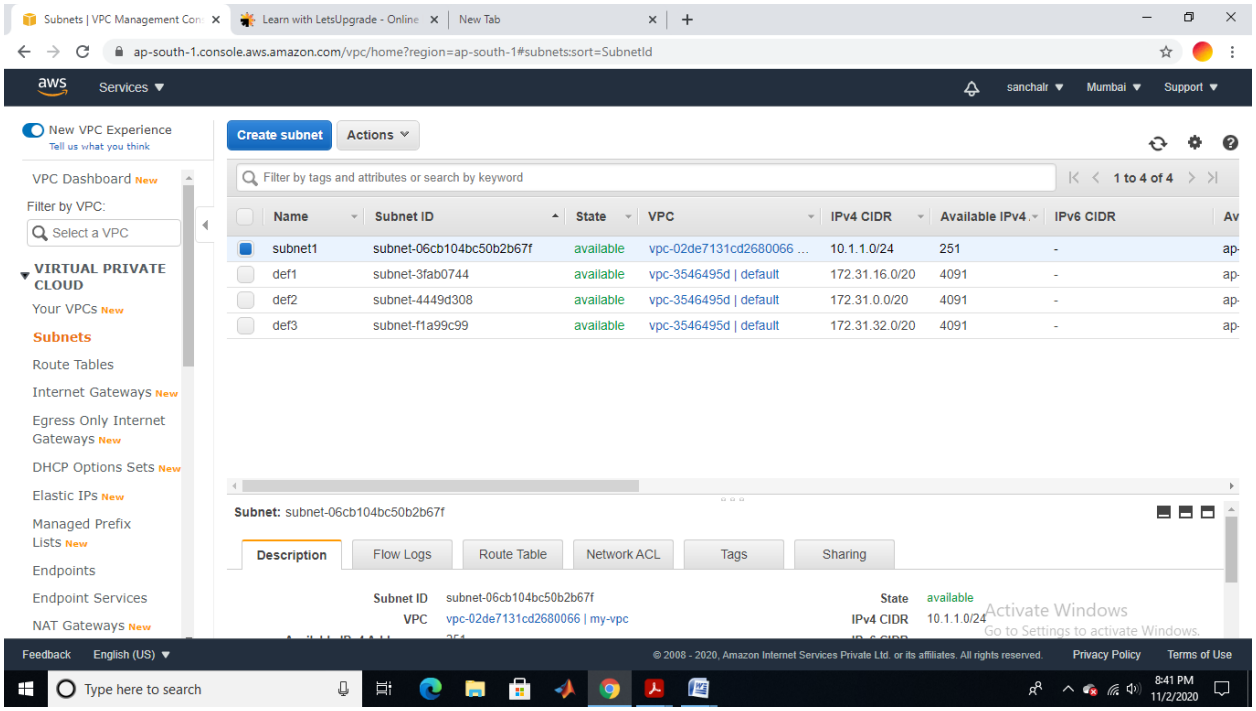


CREATING AN EC2 INSTANCE IN CUSTOM VPC

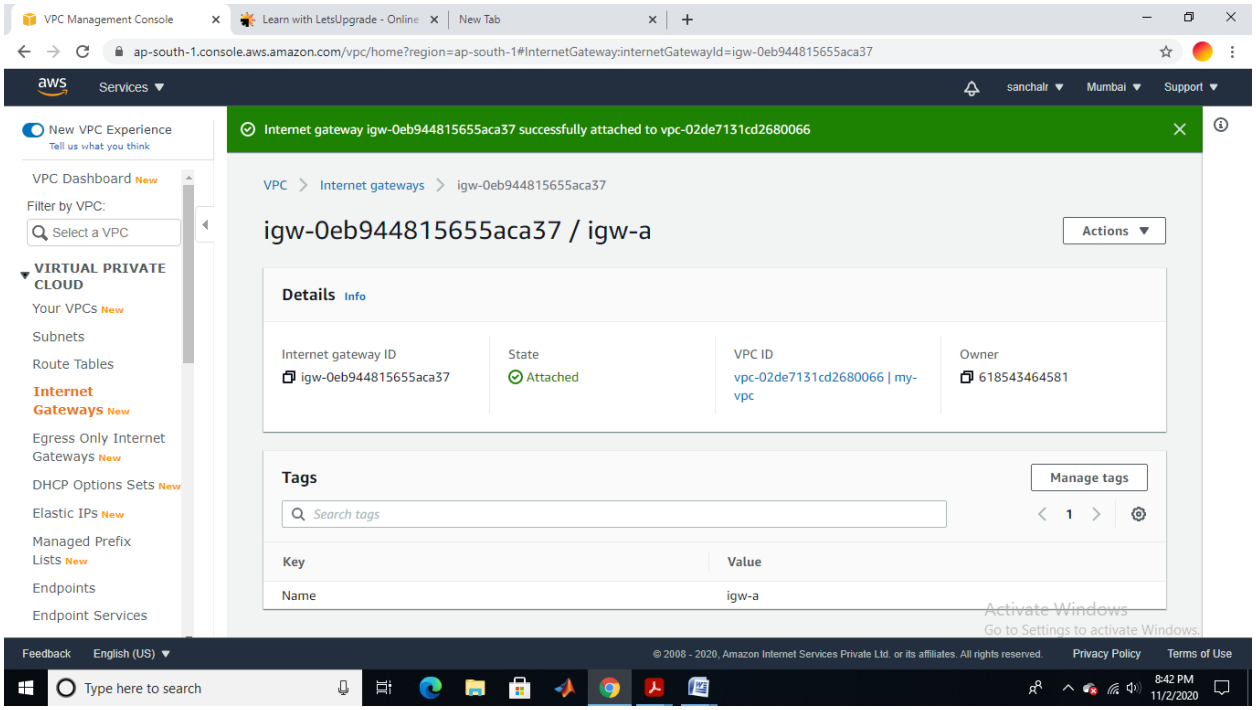
CREATE VPC



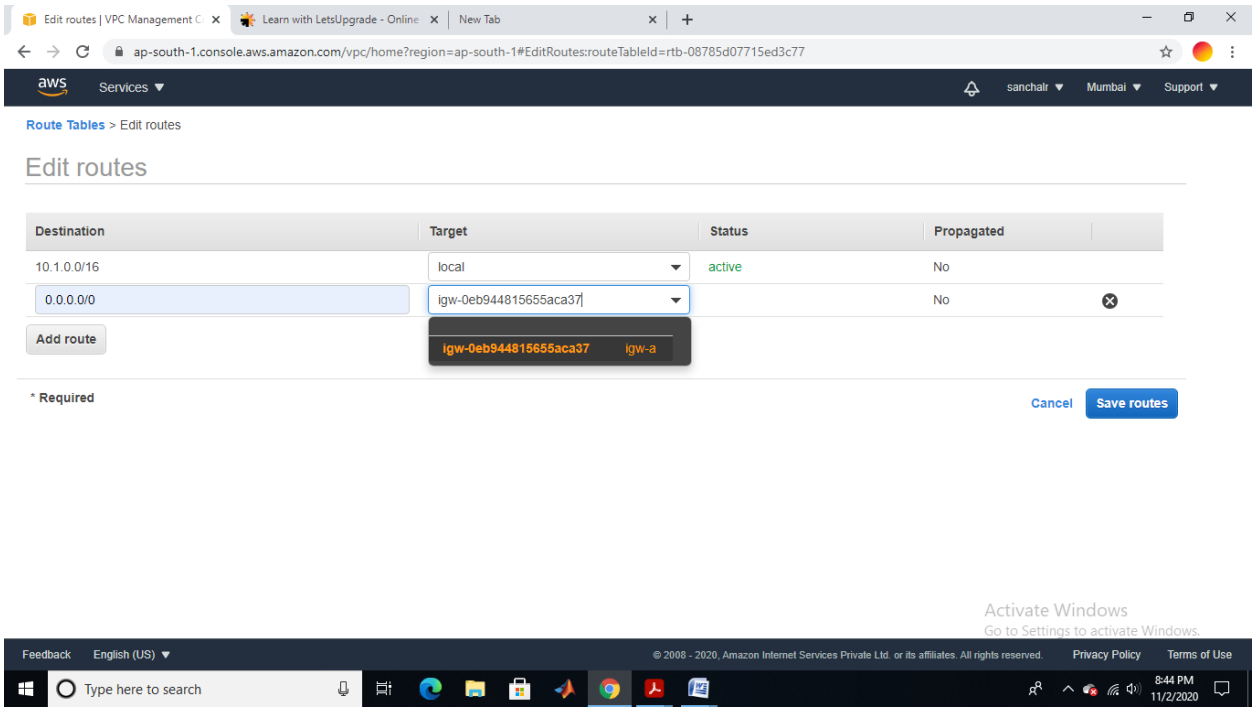
CREATE SUBNET



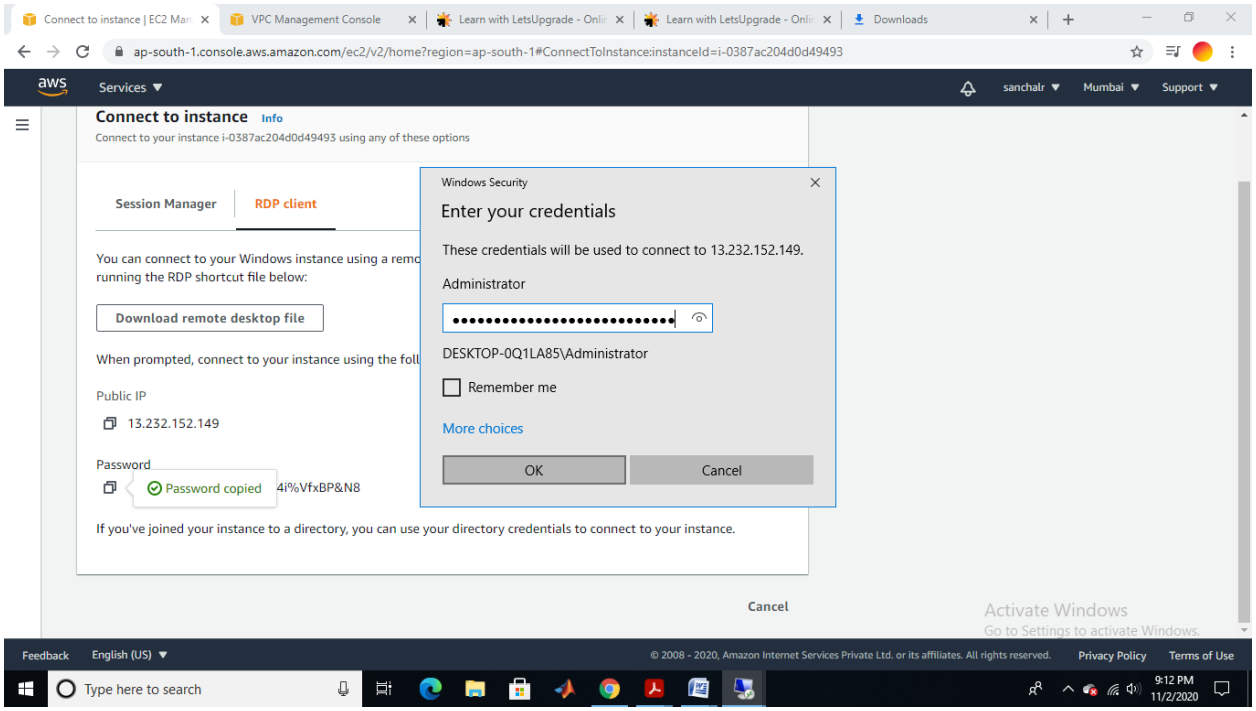
CREATE INTERNET GATEWAY



CREATE ROUTE TABLE

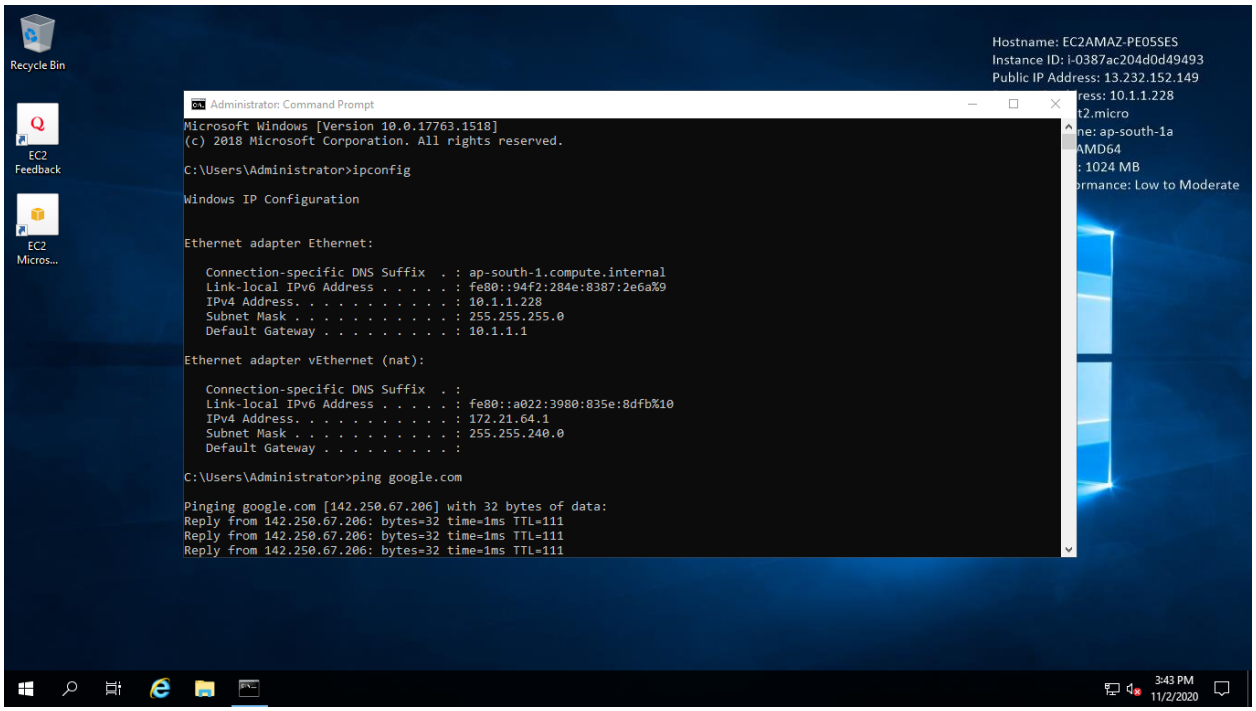


CONNECTING TO INSTANCE



VERIFICATION USING IPCONFIG

INTERNET PROTOCOL CONFIGURATION (IPCONFIG) DISPLAYS THE IP ADDRESS, SUBNET MASK, AND DEFAULT GATEWAY AND USED FOR NETWORK CONNECTIVITY.



WINDOWS EC2 INSTANCE