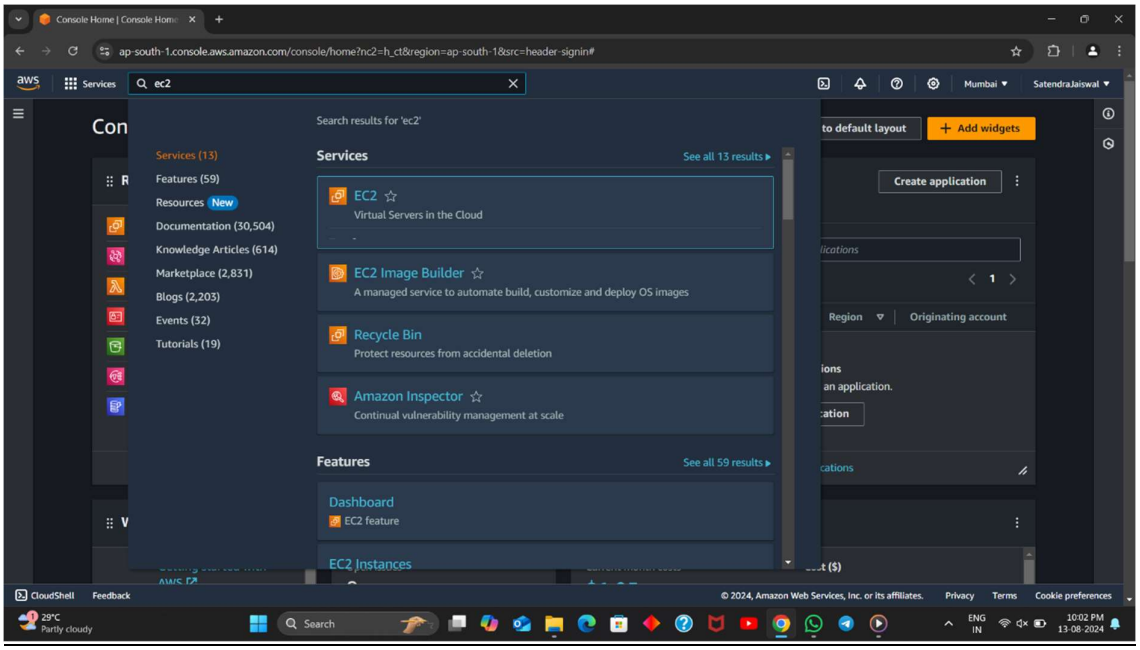
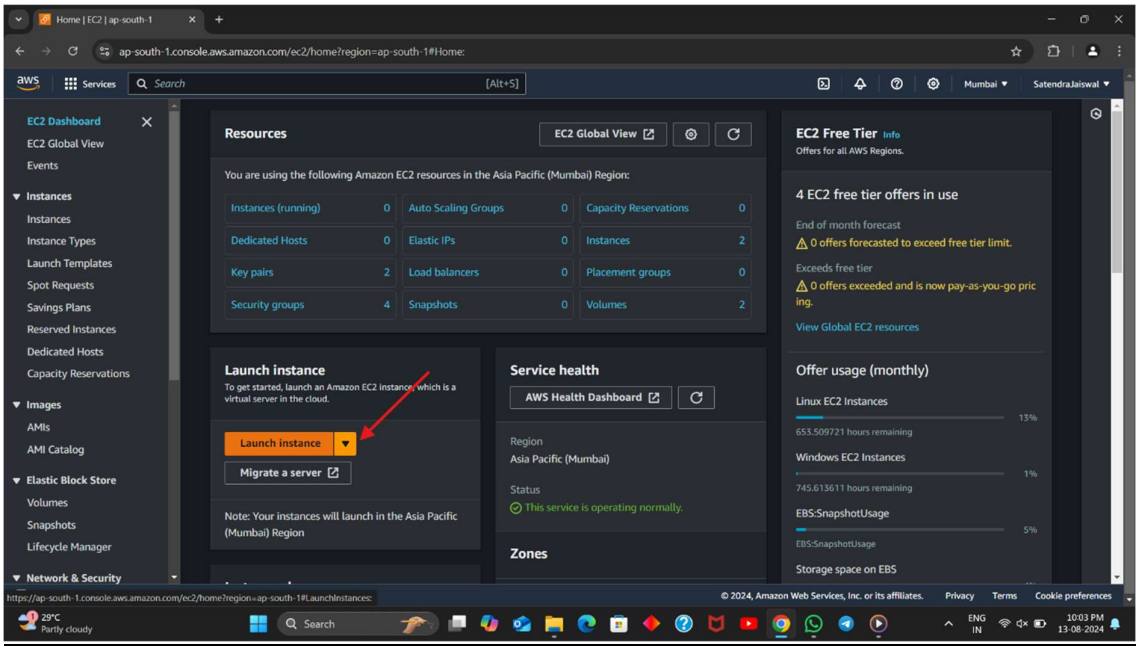
Amazon AWS

EC2 Server Instance Start/Stop Using Lambda

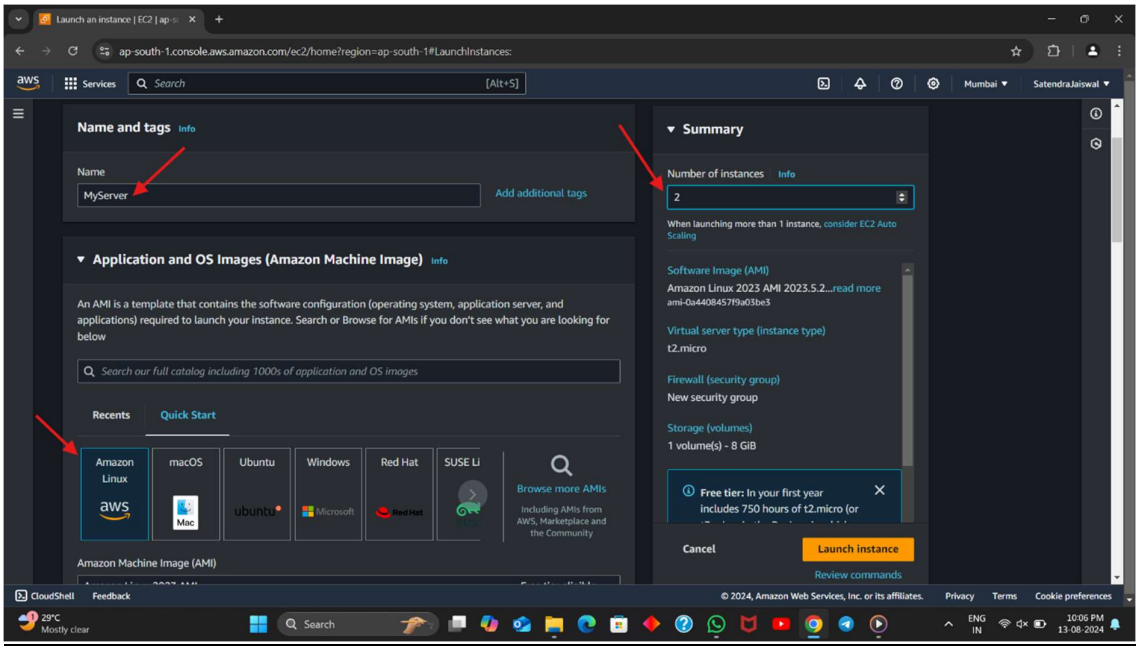
Step 1:- Sign in to Amazon AWS Management Console and Search For EC2



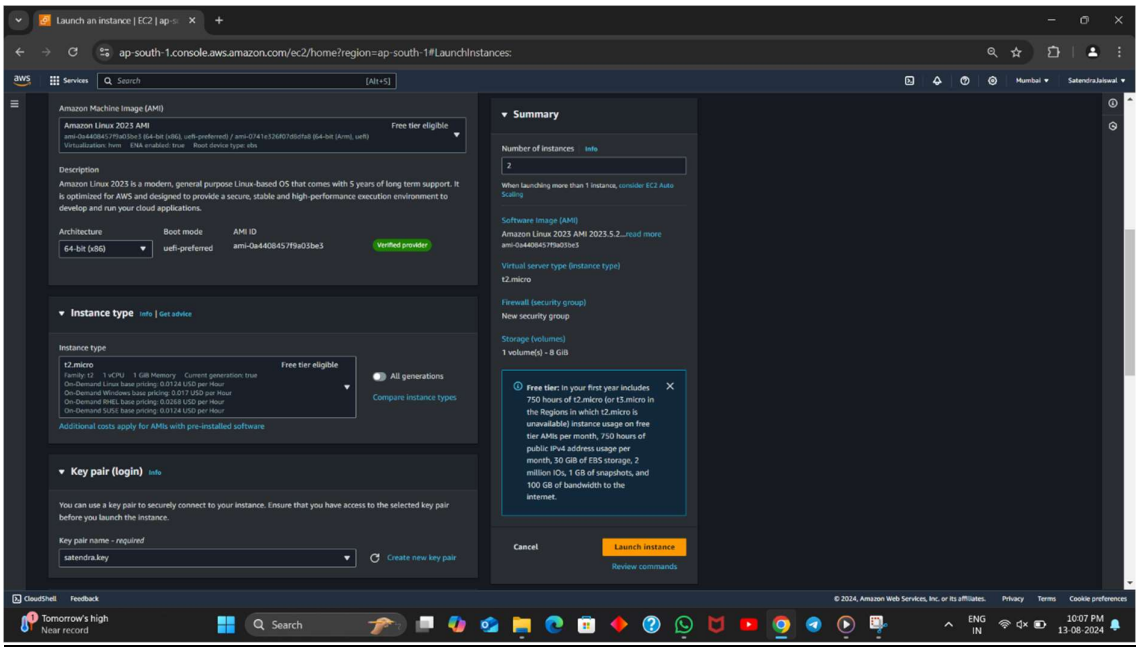
Step 2:- Click On Launch Instance to Launch An Instance



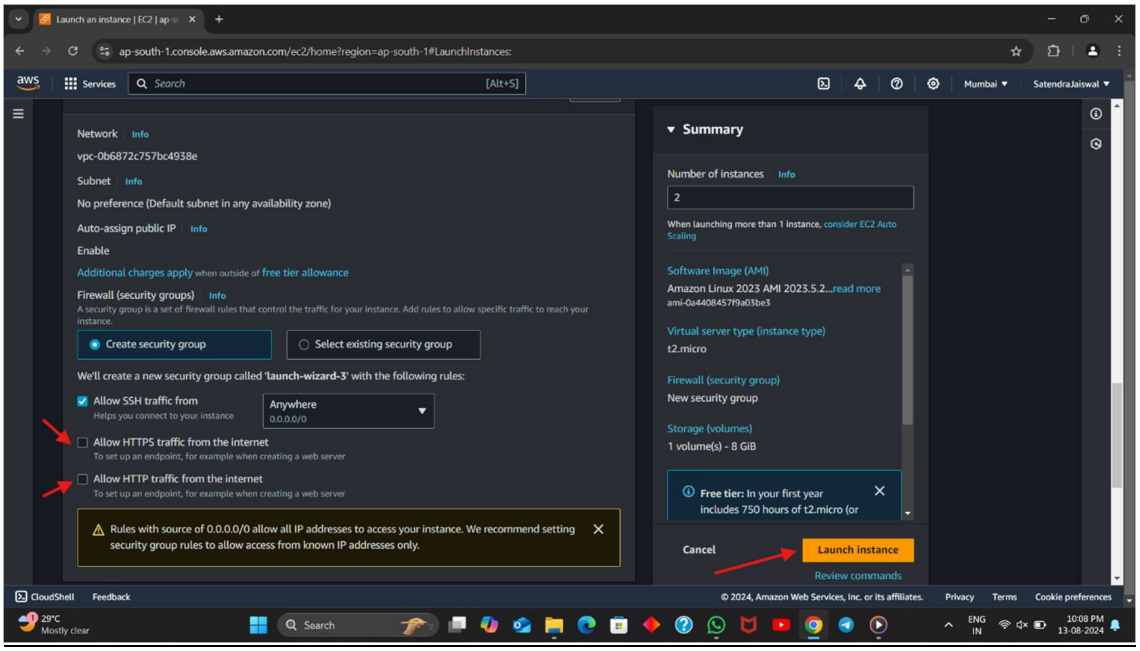
Step 3:- Enter A Name For Instance→Set Number of Instances to 2→Select Any OS(Here We Will Choose Amazon Linux)



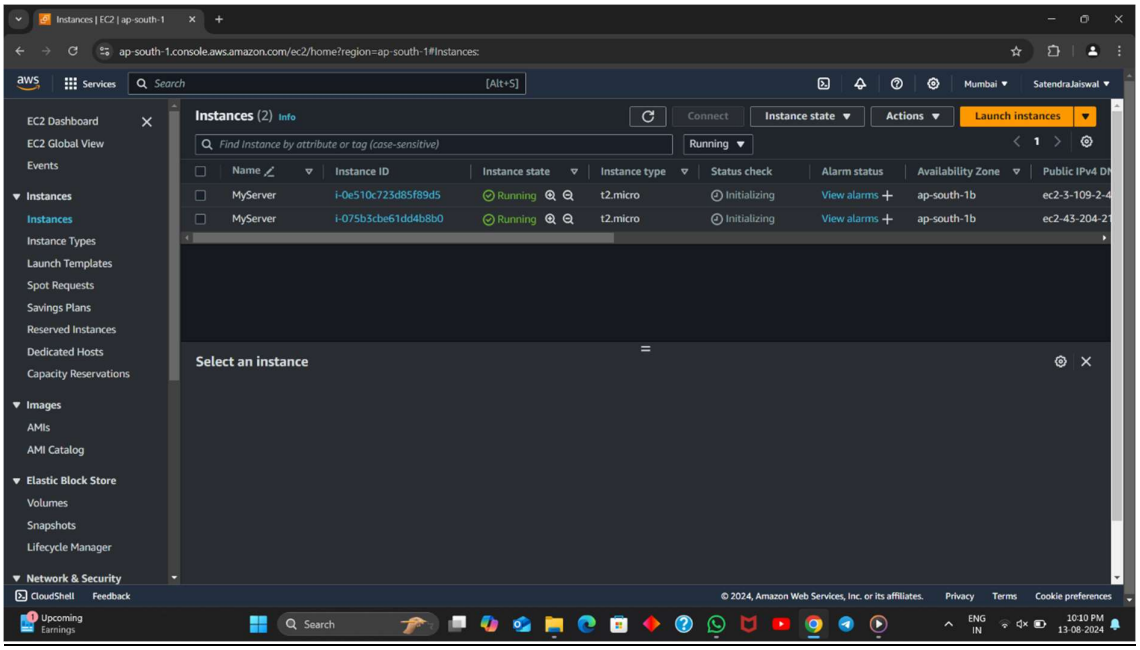
Step 4:- Select Amazon Machine Image(AMI),Instance Type, and Key Pair



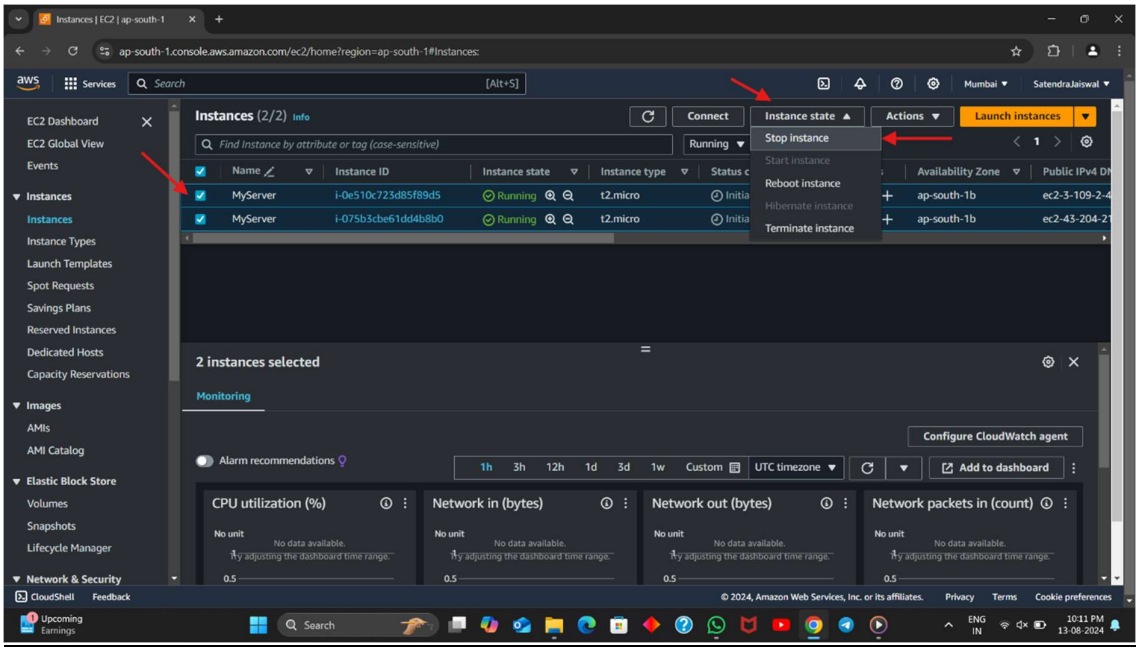
Step 5:- Allow HTTPS and HTTP Connection and Click on Launch Instance to Launch The Instances



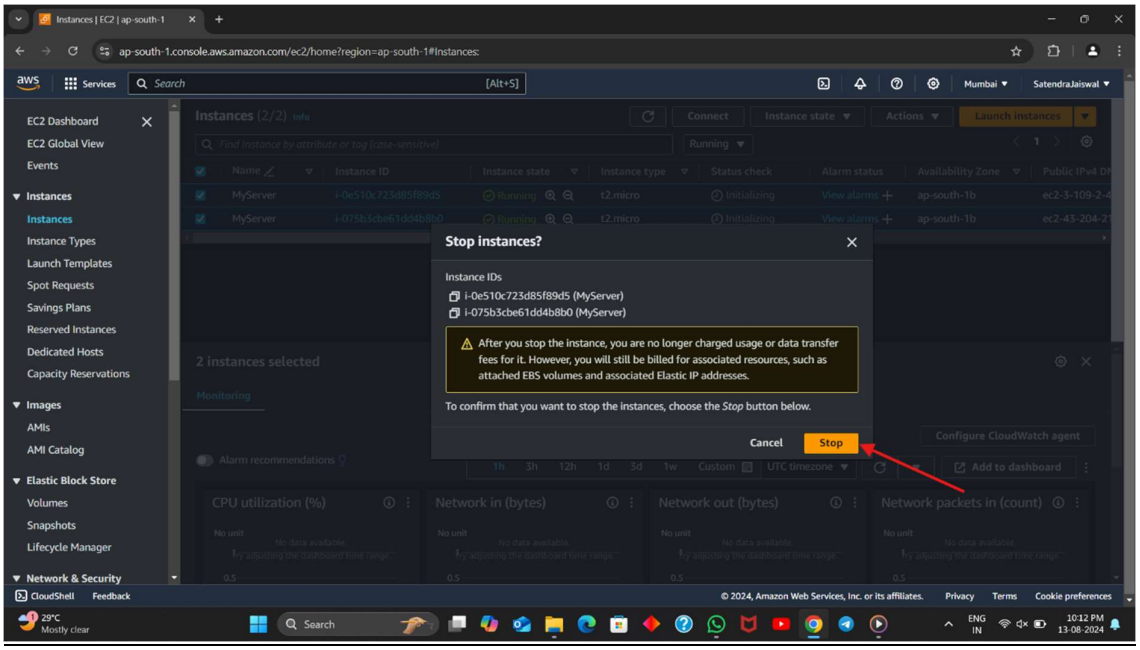
Instances Are Launched Successfully:



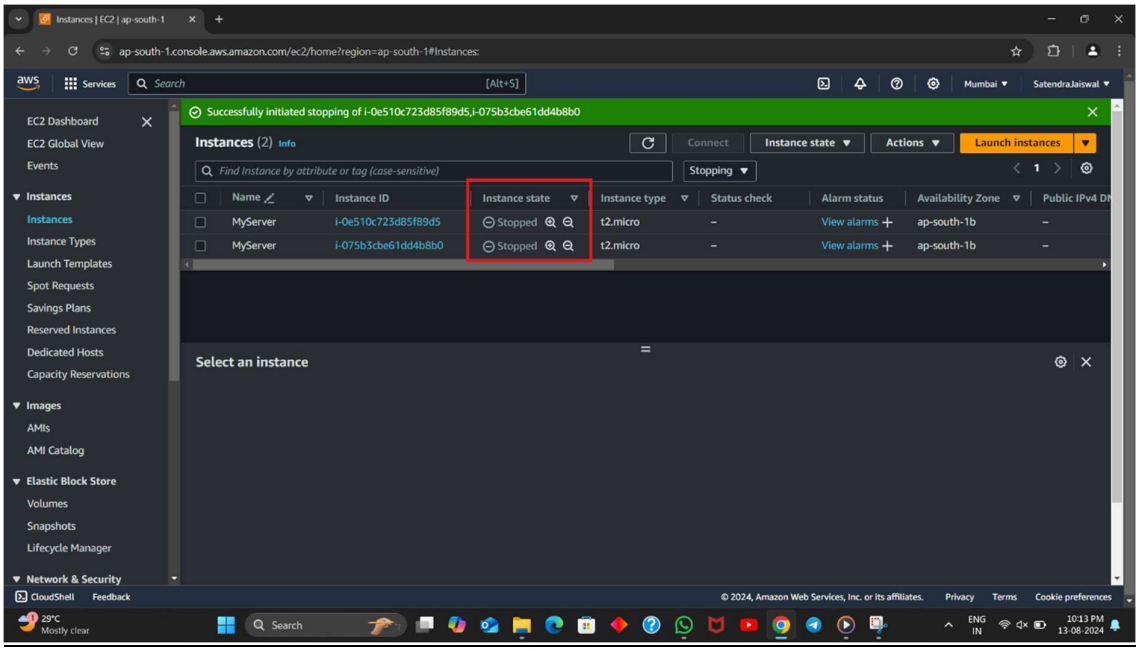
Step 6:- Now Stop The Server By Clicking Instance State→Stop Instance



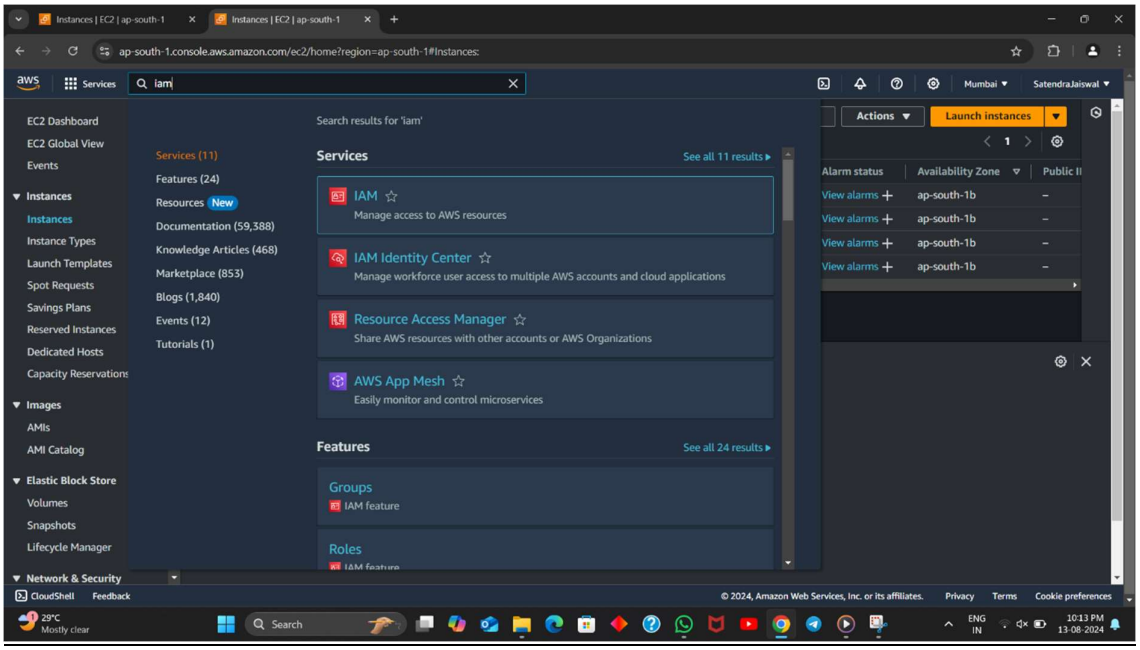
Click on Stop



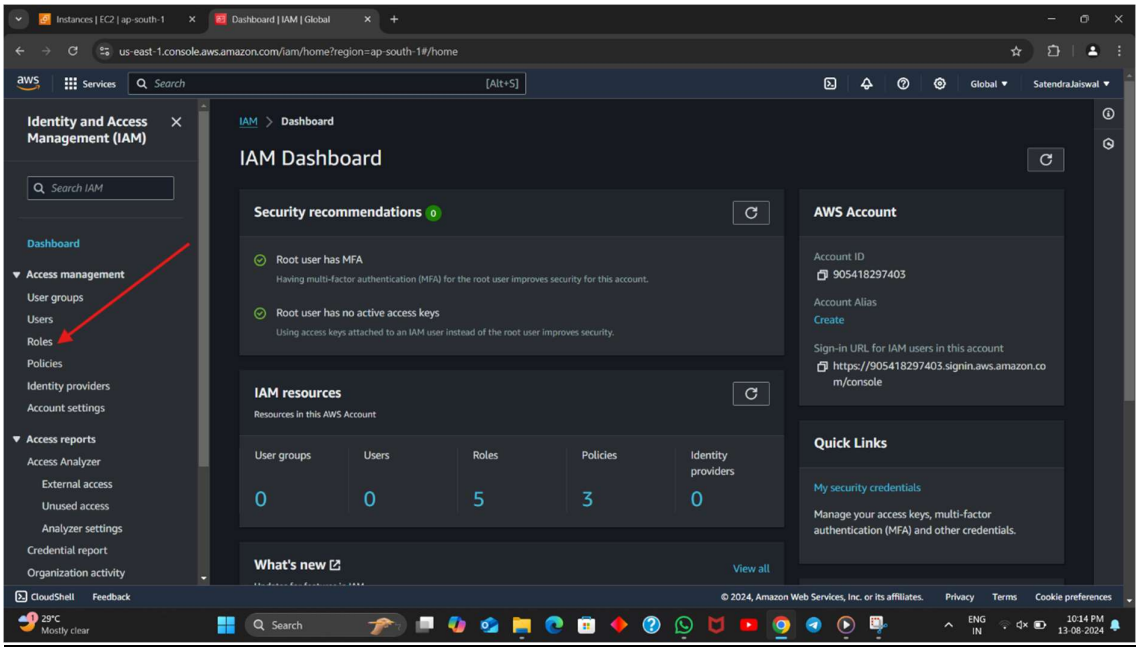
Instances are Stopped Successfully



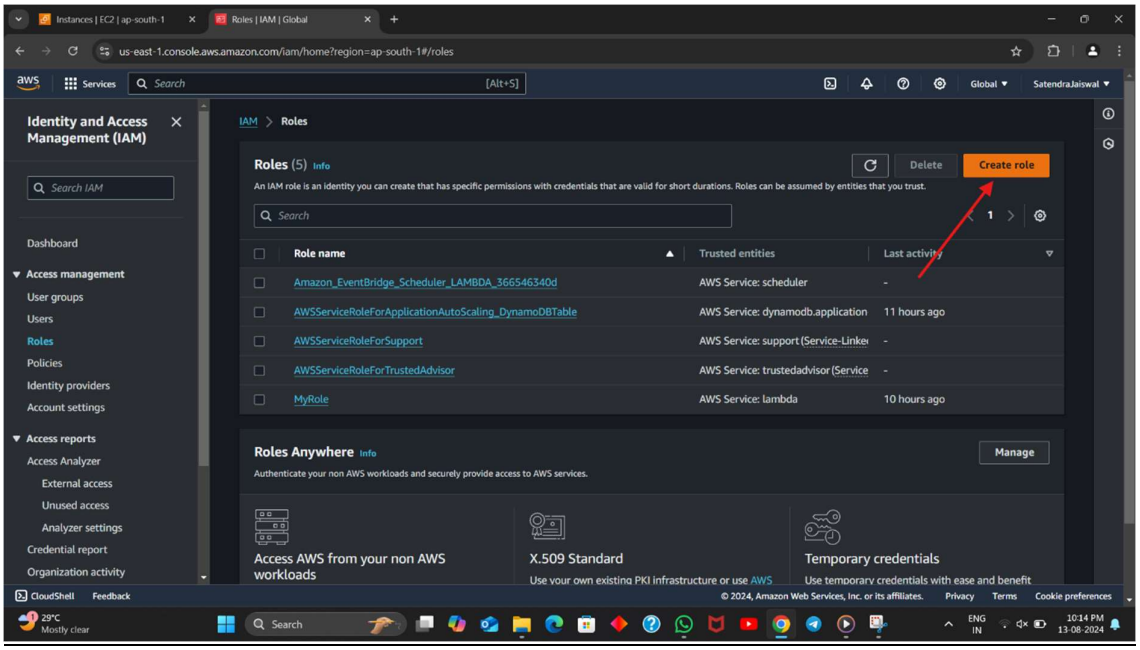
Step 7:- Now GoTo Search Bar and Search For IAM



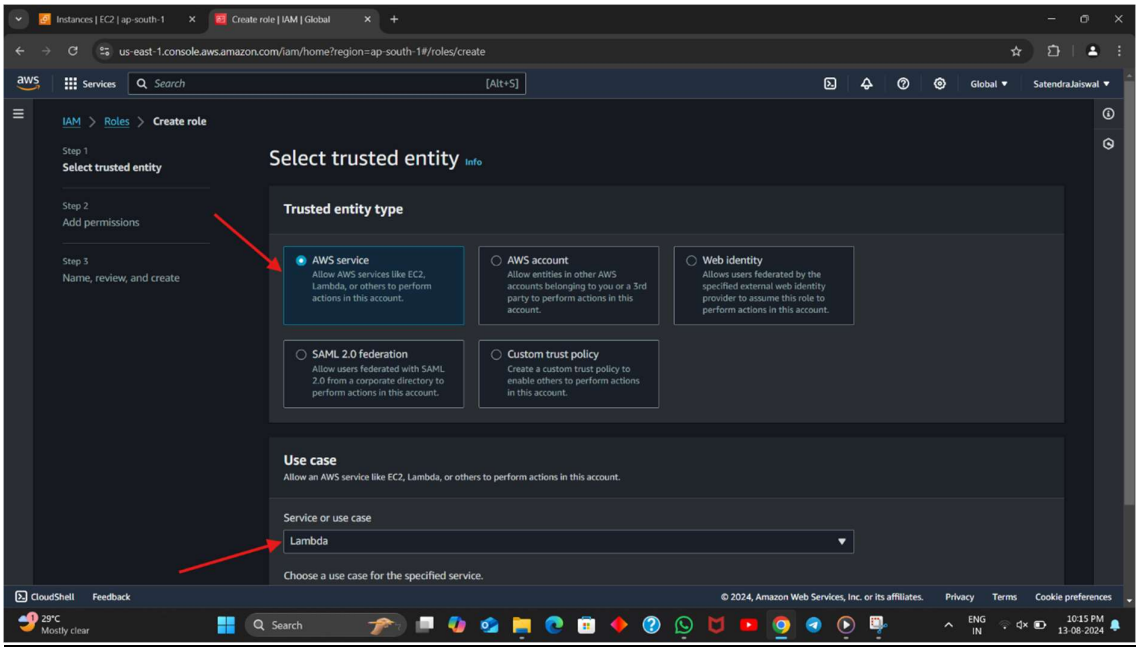
Step 8:- Click on Rules



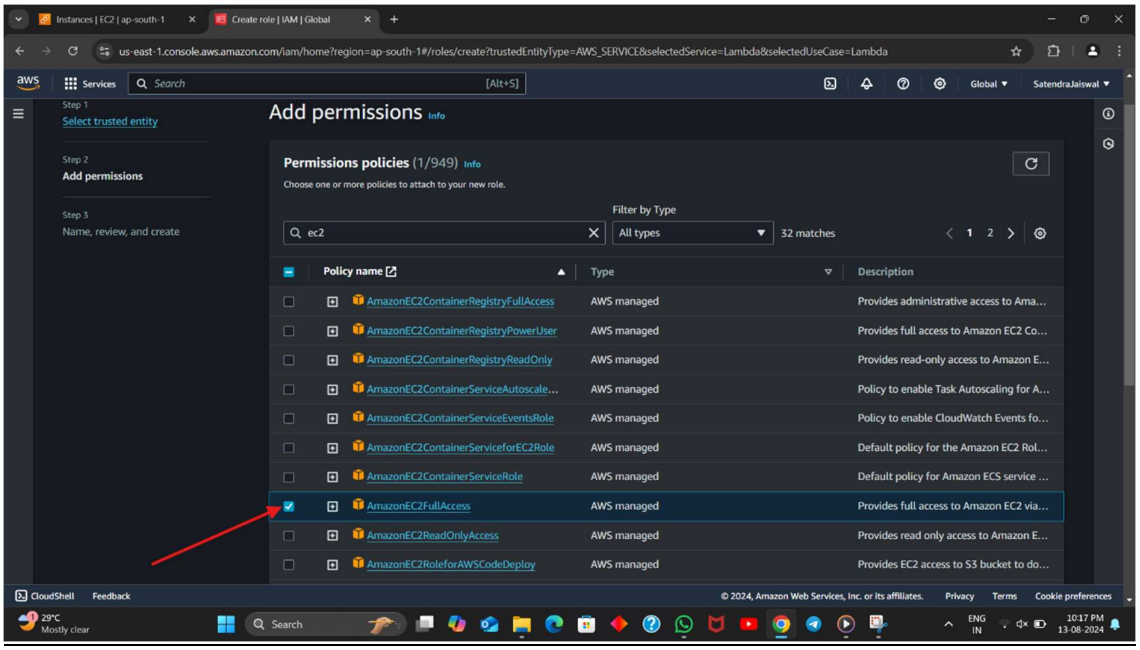
Step 9:- Click Create Role



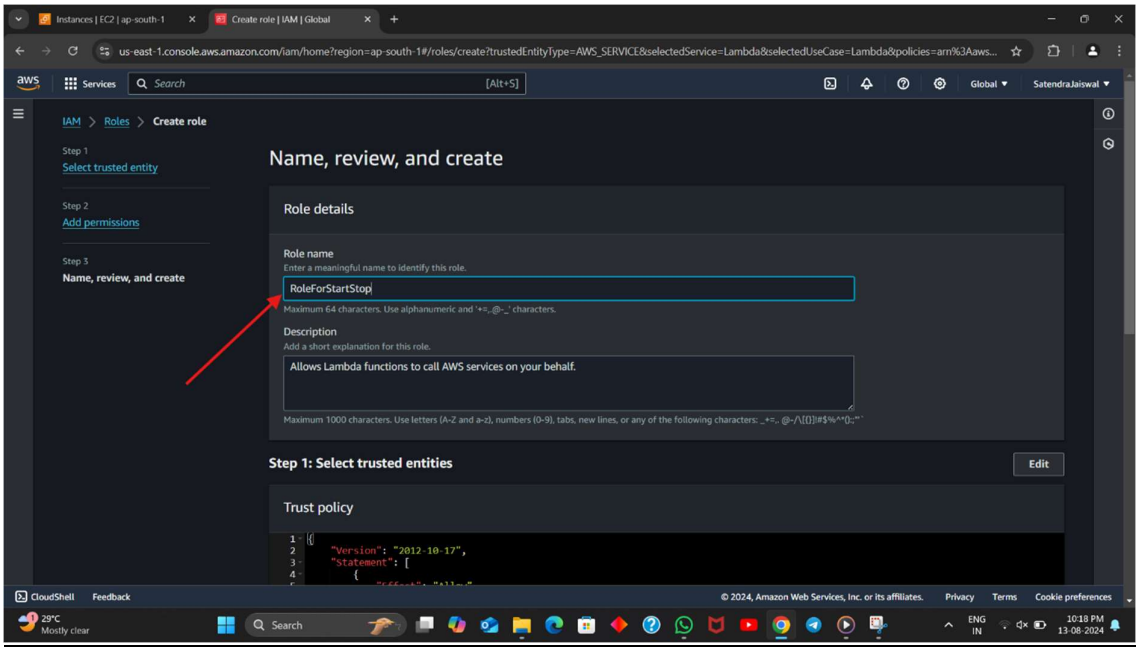
Step 10:- Now Under Select Trusted Entity, Choose AWS Service & Choose Lambda Under Use Case



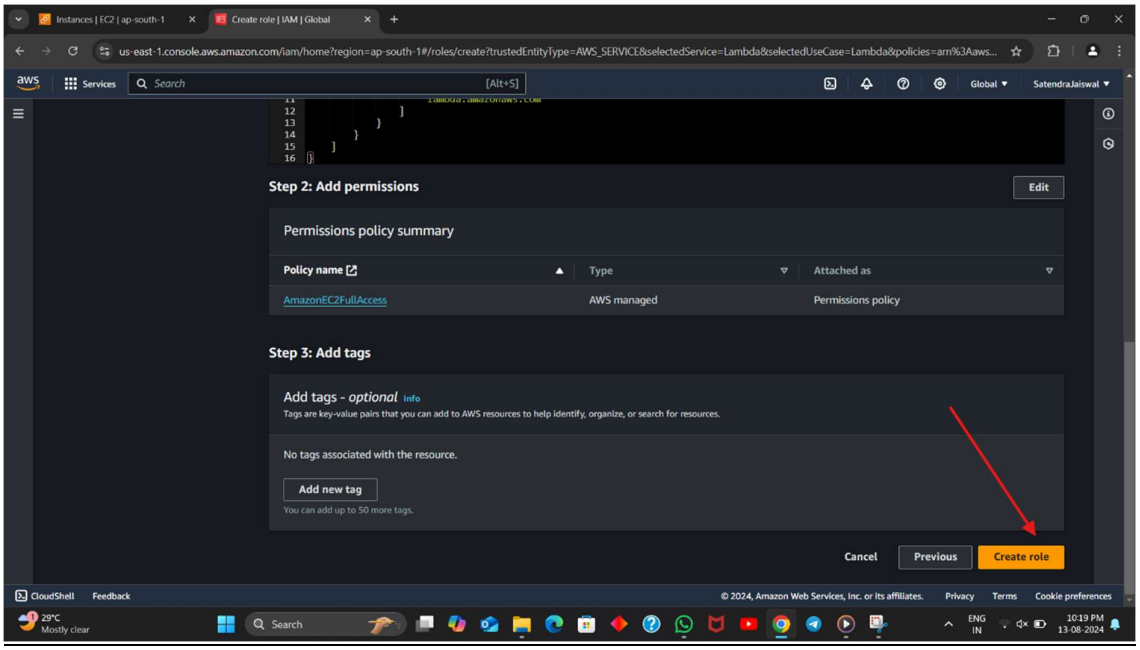
Step 11:- Give EC2 Full Access Permission To The Role



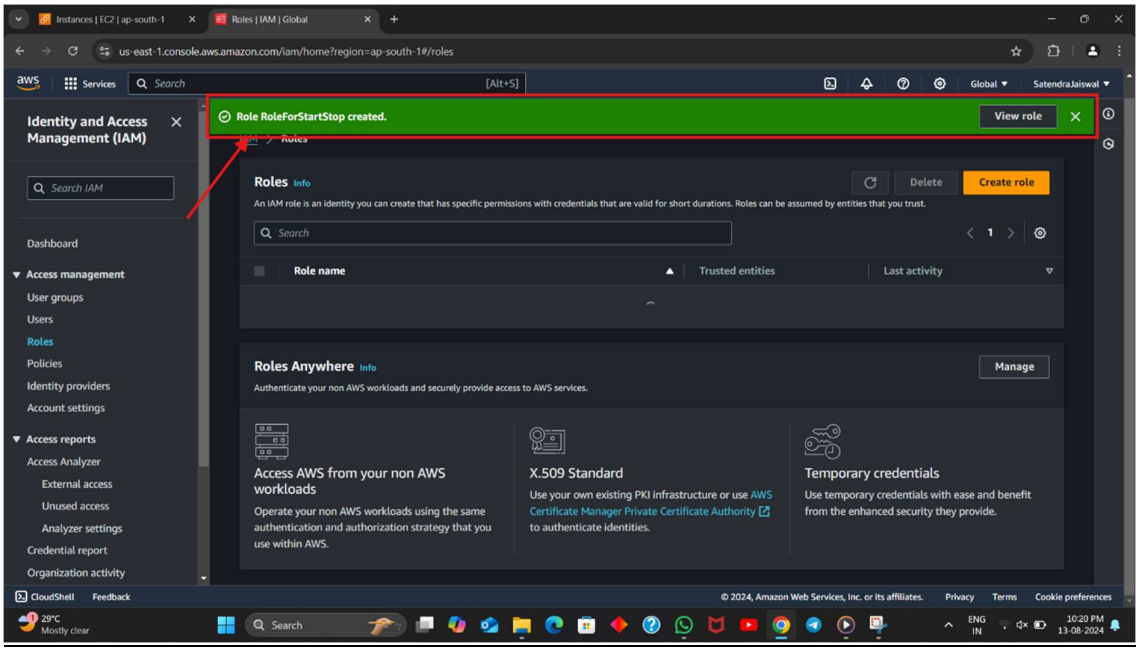
Step 12:- Give Role A Name



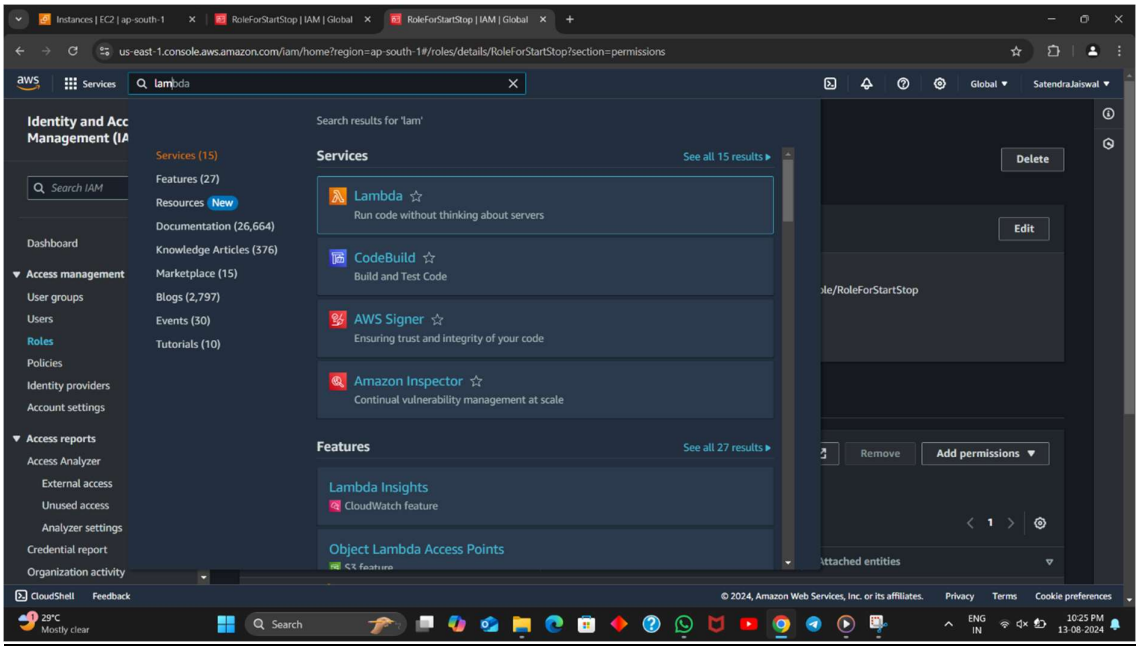
Step 13:- Click Create Role



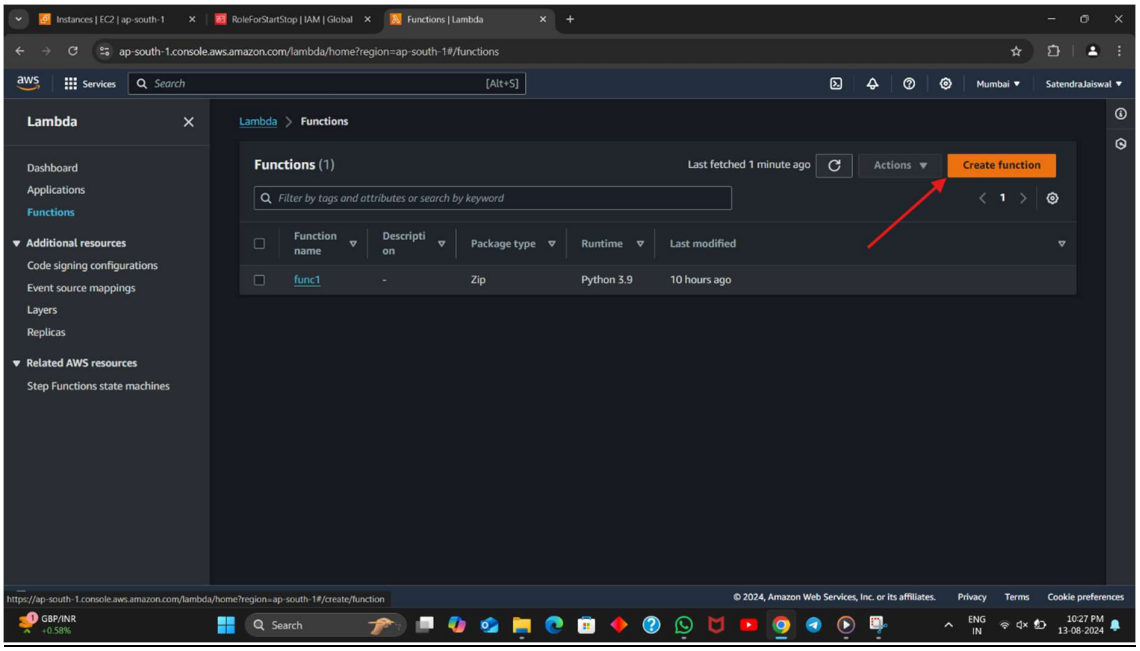
Role is Created Successfully



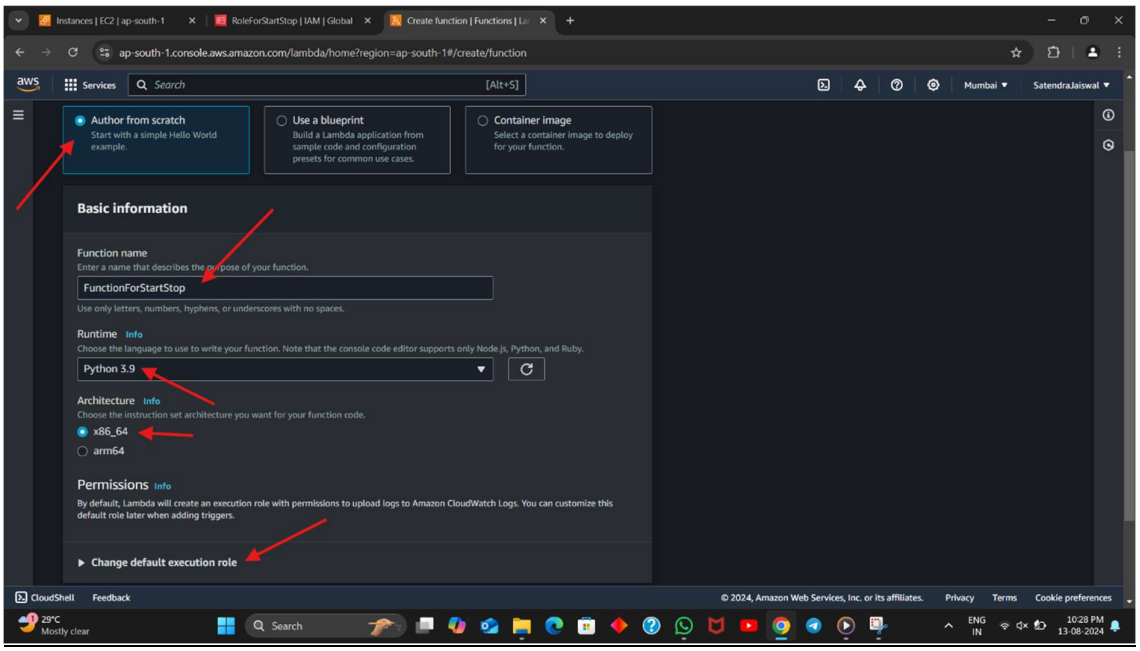
Step 14:- Now Search For Lambda and Open it



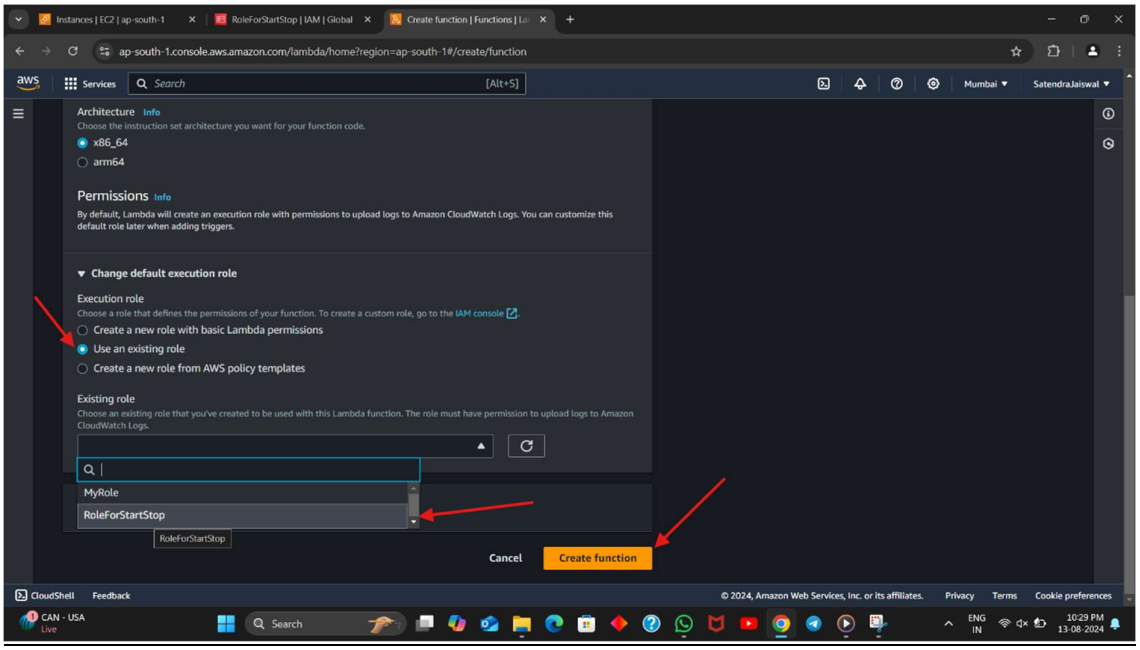
Step 15:- Click on Create Function



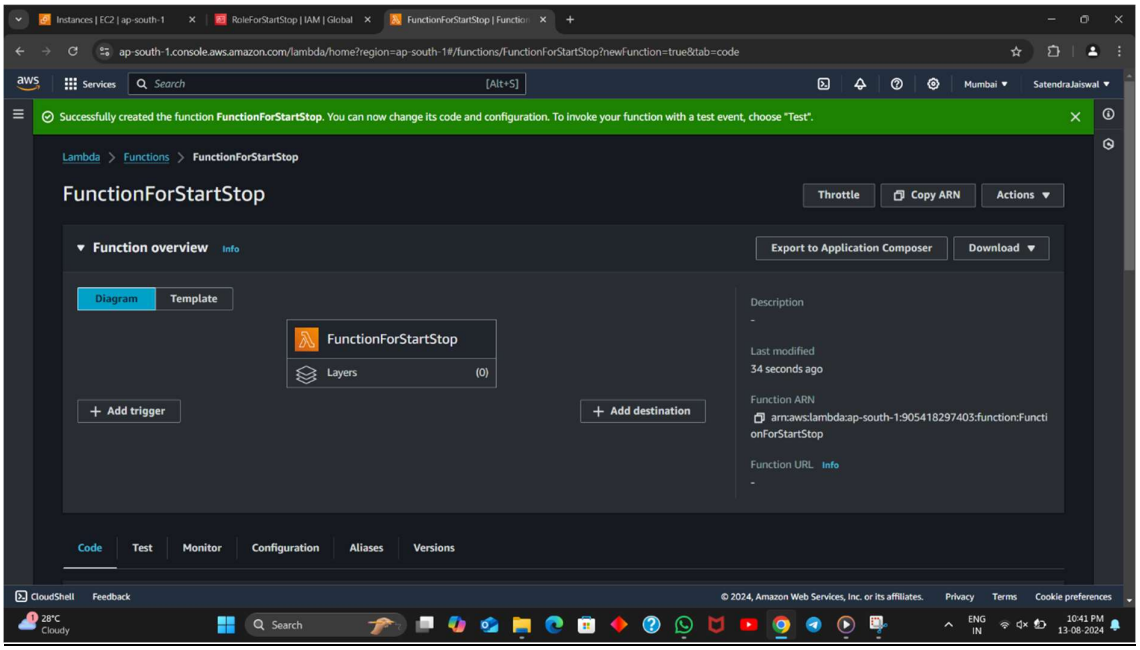
Step 16:- Select Author From Scratch→Enter Function Name→Select Python 3.9 As Runtime→Select x86_64 as Architecture→And Click On Change Default Execution Role



Step 17:- Click on Use an Existing Role and Select The Role Created in Step 7-13→Click on Create Function



Lambda Function Created Successfully

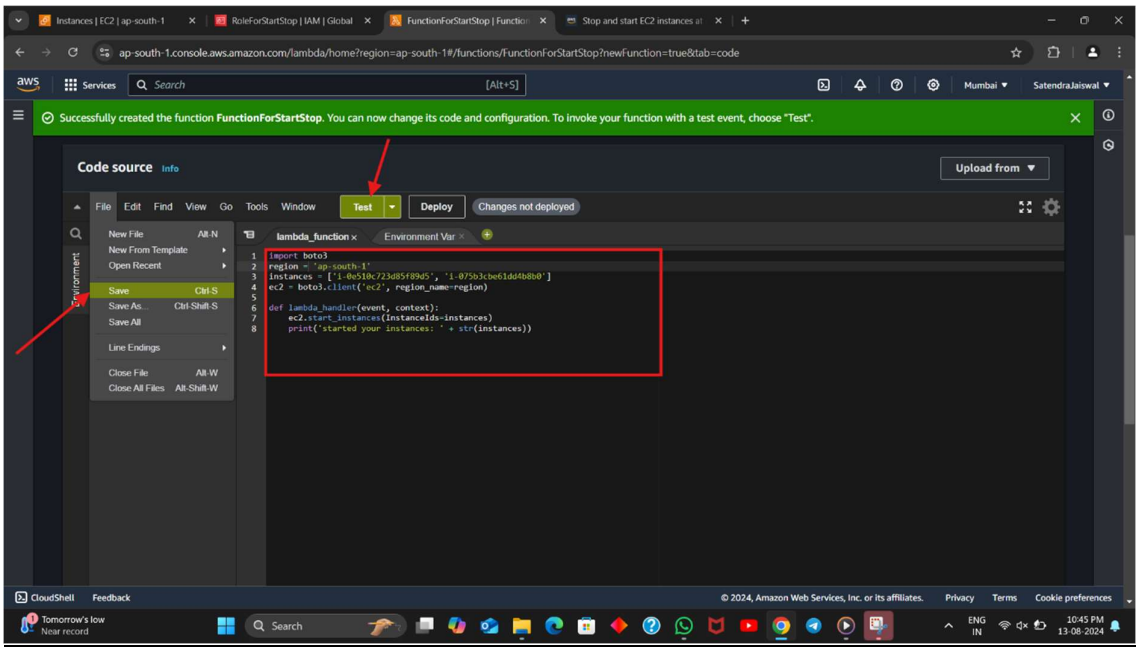


Step 18:- Scroll Down And Write The Following Lambda Function Code In The Code Section To Start The Instance

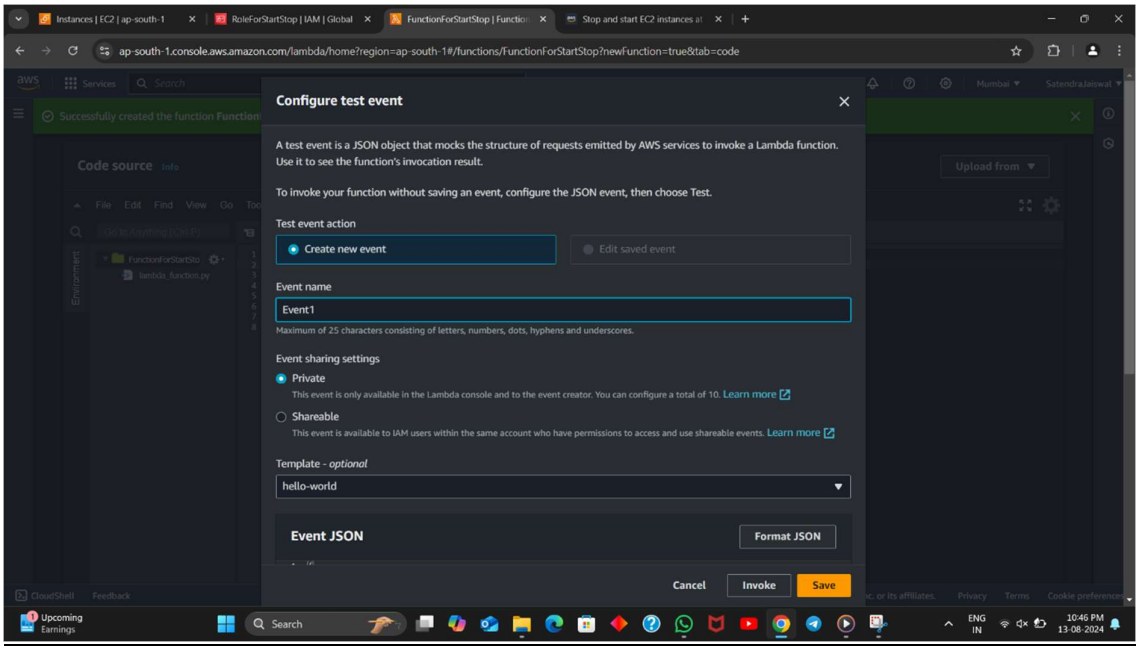
```
import boto3
region = 'us-west-1'
instances = ['i-12345cb6de4f78g9h', 'i-08ce9b2d7eccf6d26']
ec2 = boto3.client('ec2', region_name=region)

def lambda_handler(event, context):
    ec2.start_instances(InstanceIds=instances)
    print('started your instances: ' + str(instances))
```

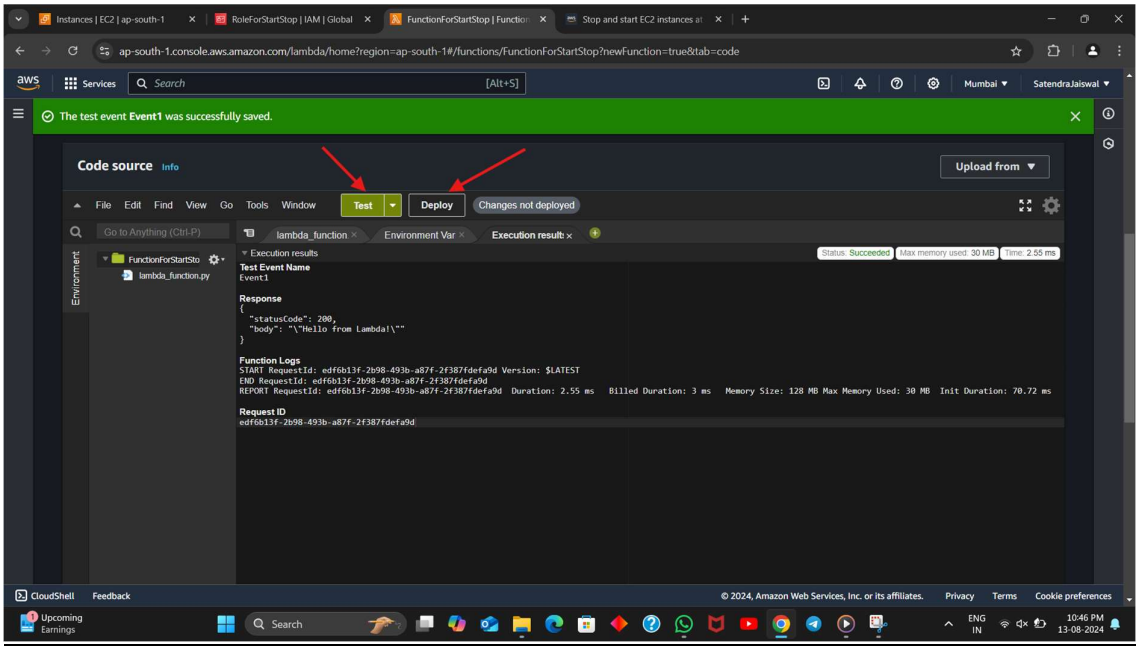
Step 19:- Save The Code→ Save The File→And Click On Test



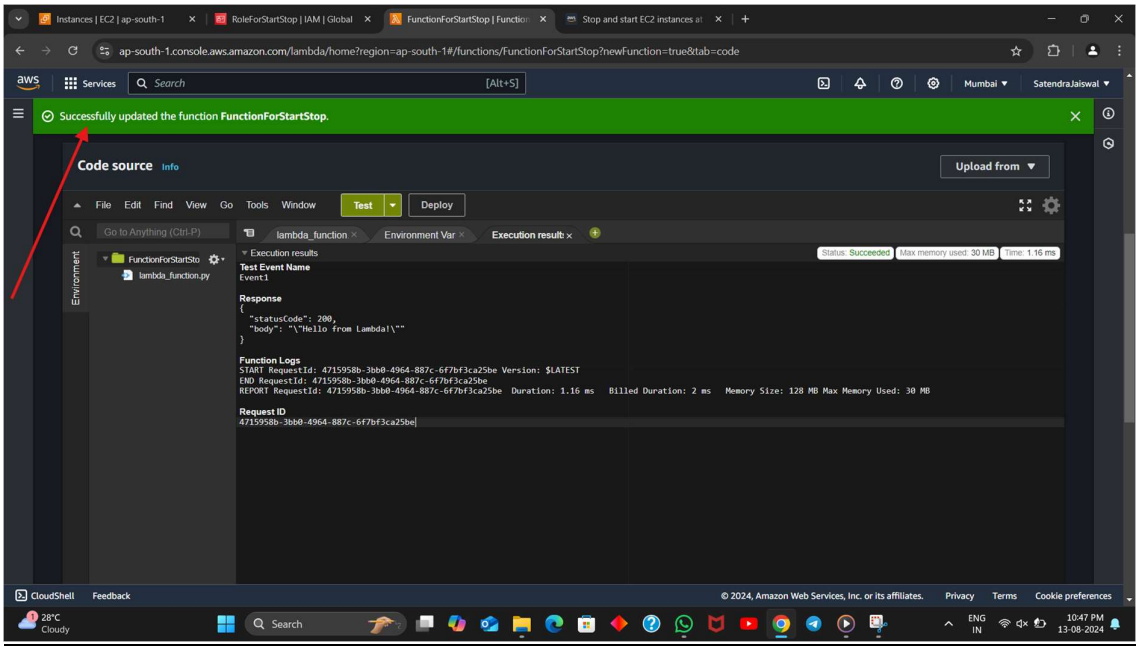
Step 20:- Enter The Test Event Name And Click On Save



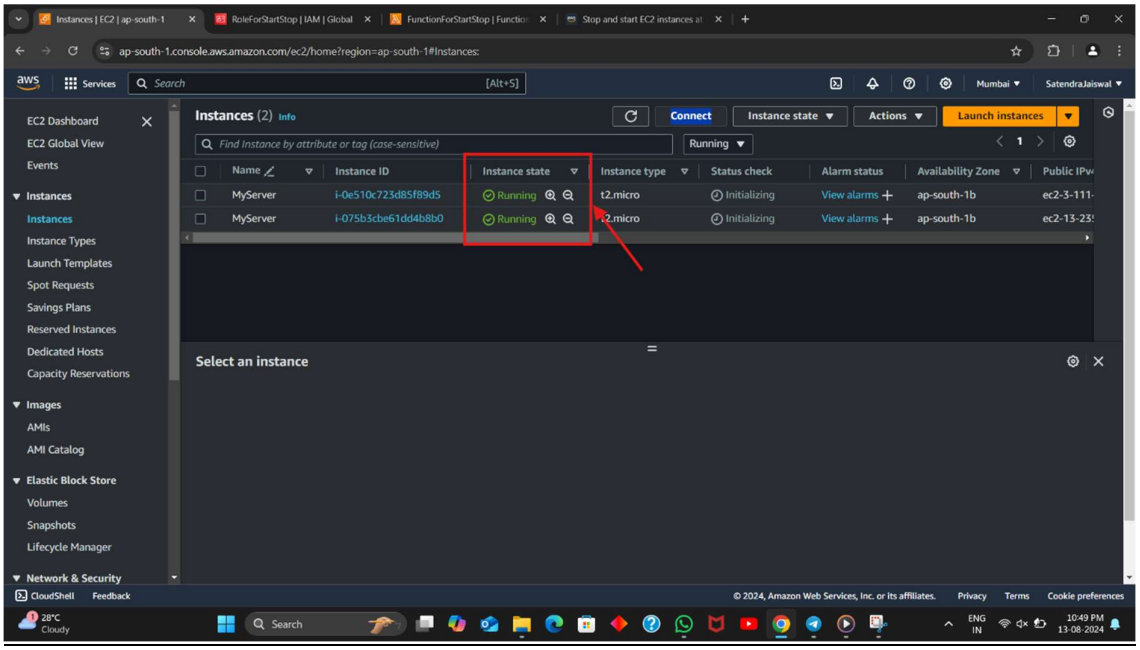
Step 21:- Test Event Created Successfully→Click On Test→Finally Deploy The Code



Lambda Function Code is Deployed Successfully



By Using The Above Code We Started Our Stopped EC2 Instance Successfully



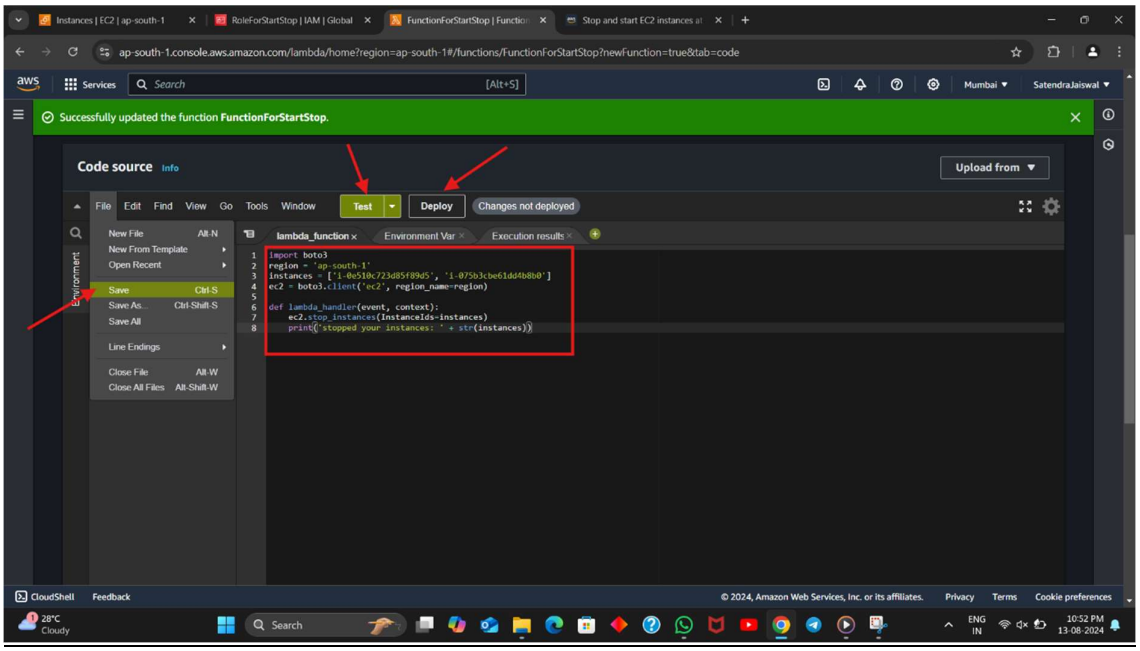
Now We Will Do The Same Thing To Stop Our Instances.

Step 22:- Write The Following Lambda Function Code In The Code Section To Stop The Running Instance

```
import boto3
region = 'us-west-1'
instances = ['i-12345cb6de4f78g9h', 'i-08ce9b2d7eccf6d26']
ec2 = boto3.client('ec2', region_name=region)

def lambda_handler(event, context):
    ec2.stop_instances(InstanceIds=instances)
    print('stopped your instances: ' + str(instances))
```

Step 23:- Write The Code→Save The File→Click On Test→Click On Deploy



Deployed Successfully

Step 24:- Here You Can See That By Using The Above The Code We Successfully Stopped Our Running Instances