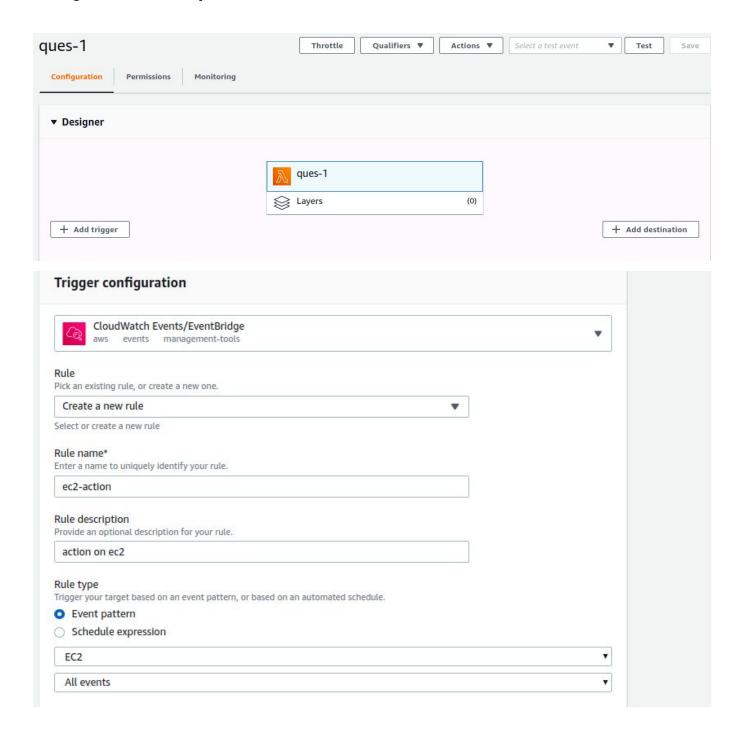
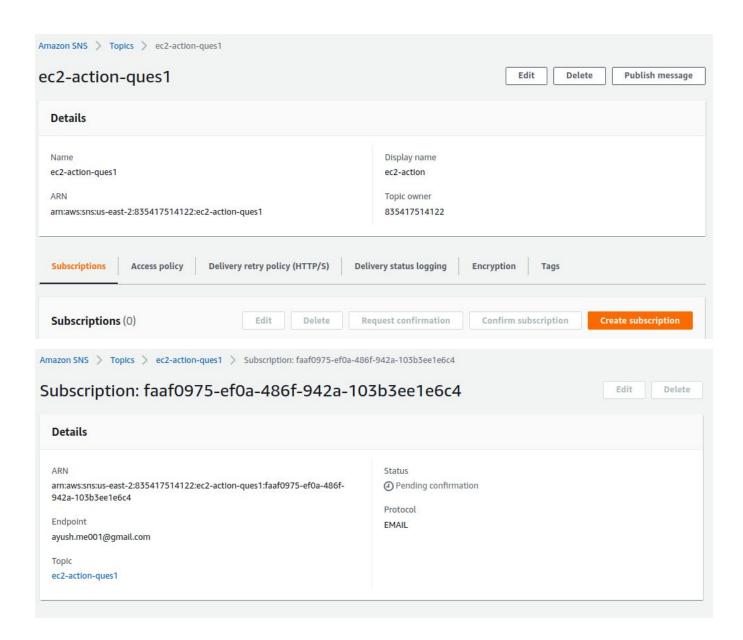
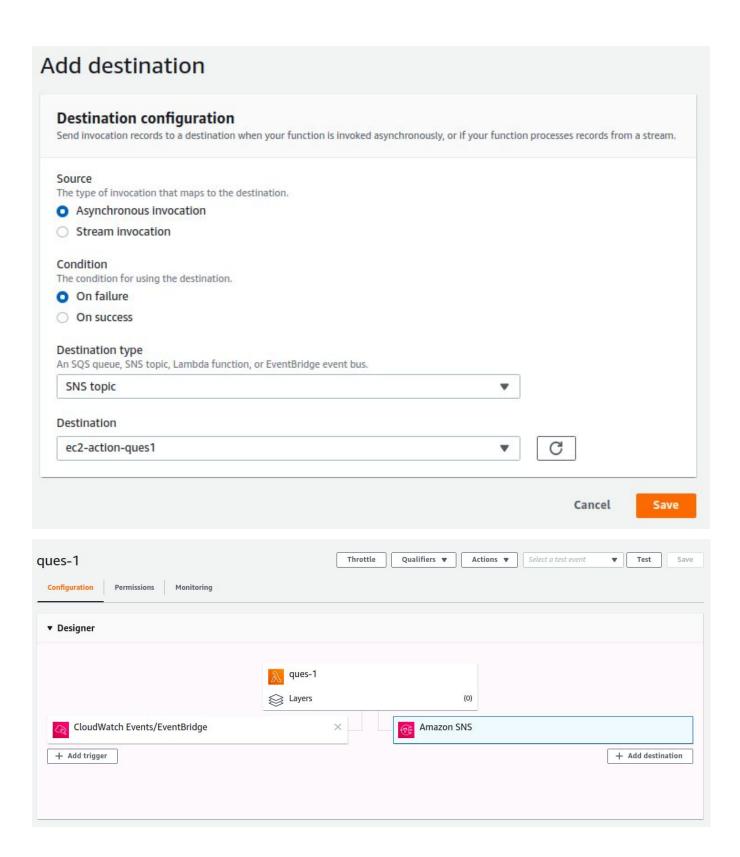
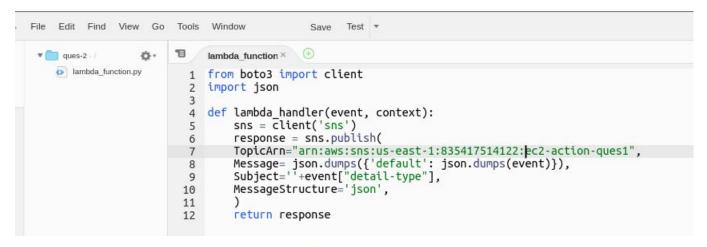
1. Create a Lambda function which get triggered from EC2 Action and Notify about changes via SNS Topic.









EC2 Instance State-change Notification > Inbox x







ec2-action <no-reply@sns.amazonaws.com>

{"version": "0", "id": "09adea73-88c2-ceb5-847d-72670e677041", "detail-type": "EC2 Instance State-change Notification", "source": "aws.ec2", "account": "835417514122", "time": "2020-04-22T11:55:43Z", "region": "us-east-2", "resources": ["arn:aws:ec2:us-east-2:835417514122:instance/i-041a02c161bf670c3"], "detail": ["instance-id": "i-041a02c161bf670c3", "state": "pending"}}

If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe: 103b3ee1e6c4&Endpoint=ayush.me001@gmail.com

Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at https://aws.amazon.com/support



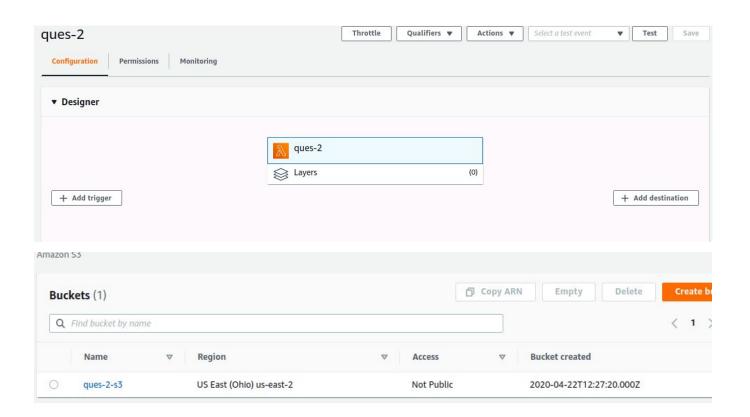
ec2-action <no-reply@sns.amazonaws.com>

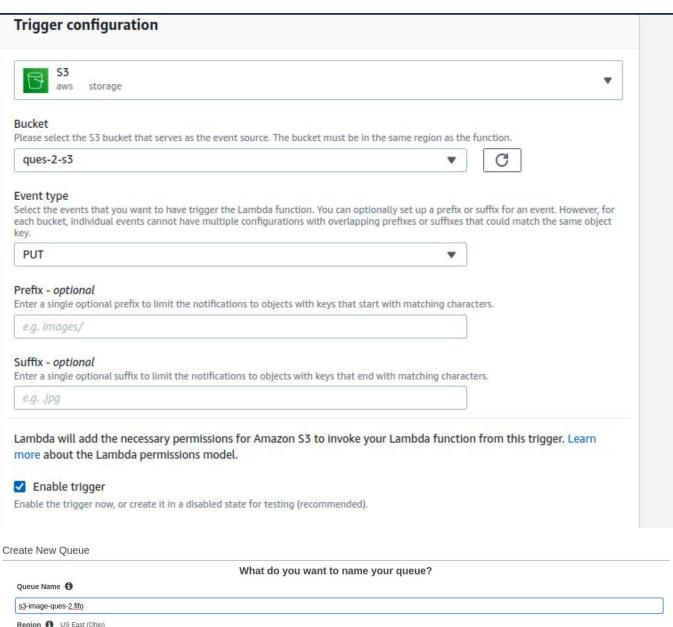
5:26 PM (0 minutes ago)

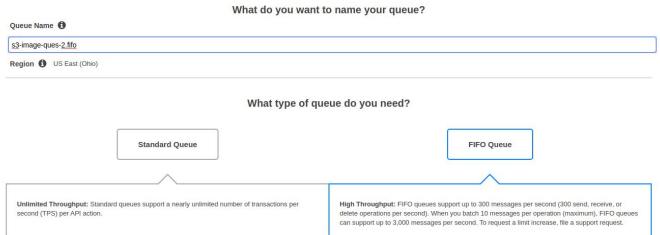
5:25 PM (1 minute ago) 🏠

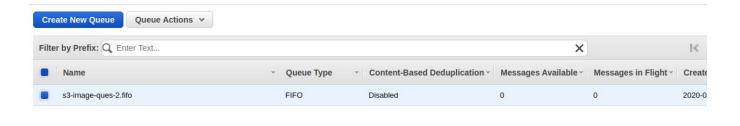
{"version": "0", "id": "6cf567e0-76e6-3ced-7487-15564c0f5a4d", "detail-type": "EC2 Instance State-change Notification", "source": "aws.ec2", "account": "835417514122", "time": "2020-04-22T11:56:05Z", "region": "us-east-2", "resources": ["arn:aws:ec2:us-east-2:835417514122:instance/i-041a02c161bf670c3"], "detail": ["instance-id": "i-041a02c161bf670c3", "state": "running"}}

2. Create a Lambda function which gets invoked whenever a image is added to a s3 bucket and push the key to SQS.

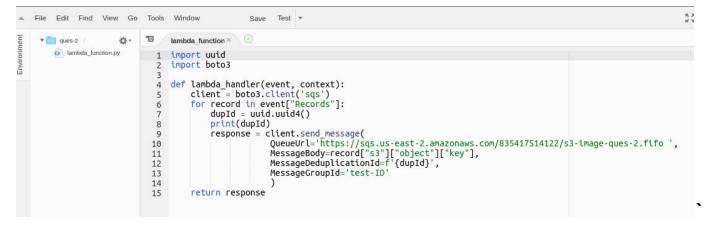


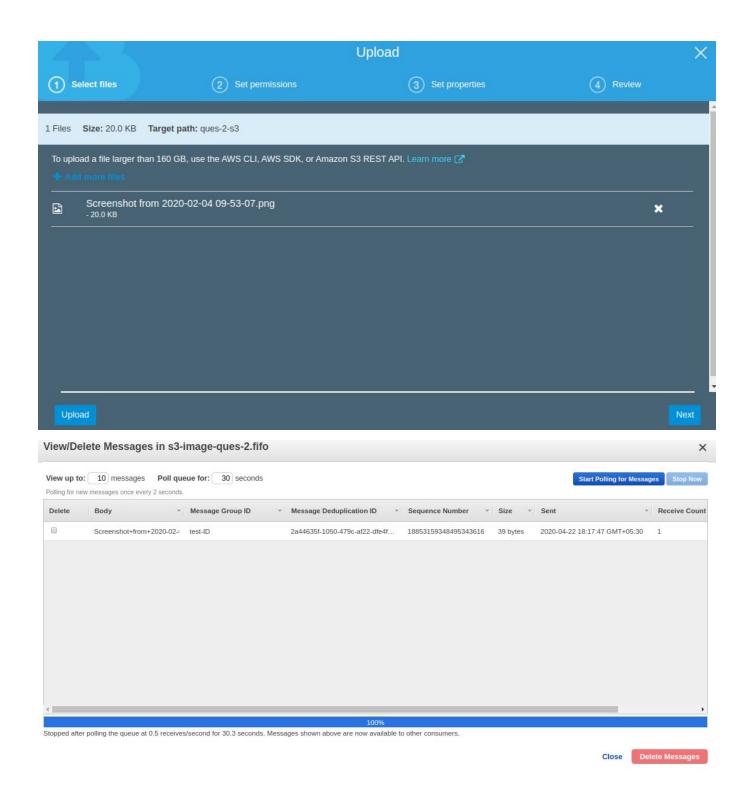




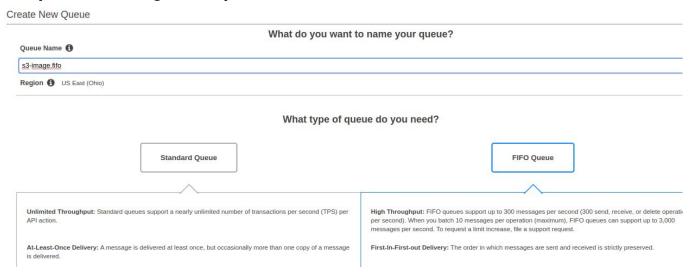


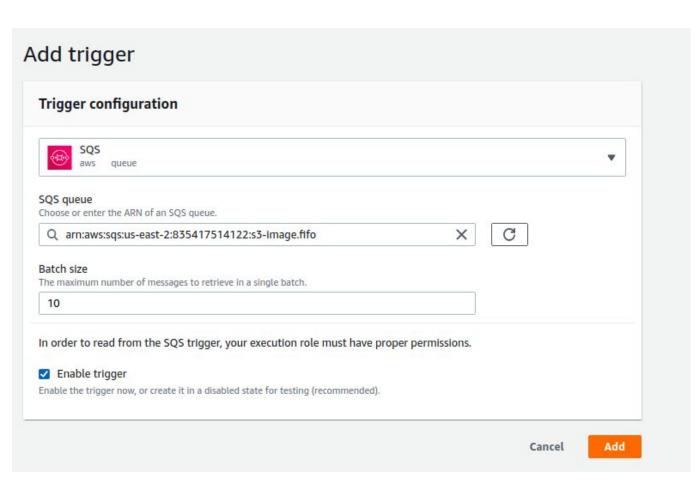


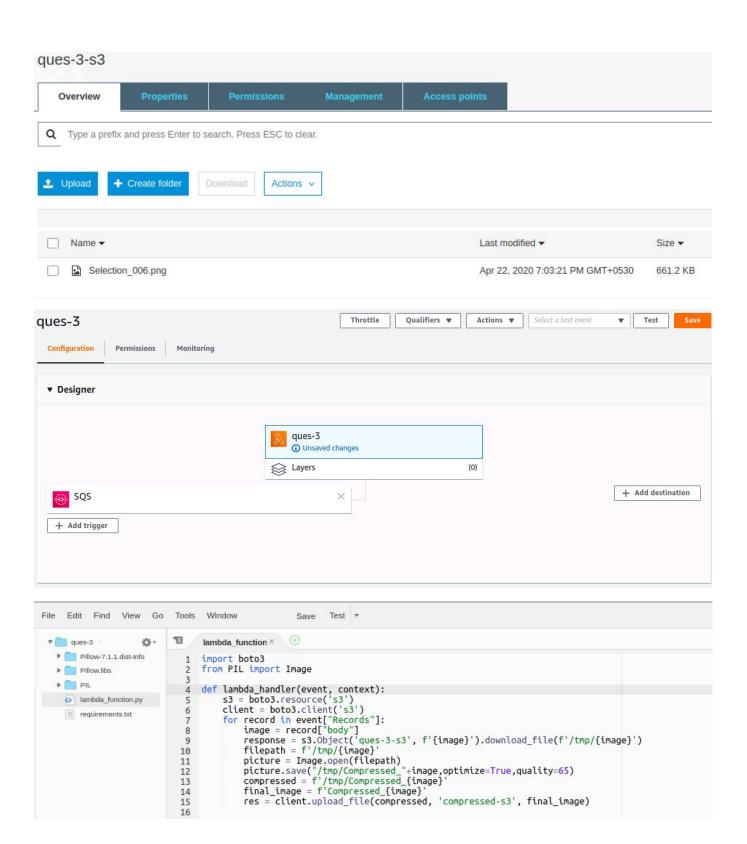




3. The SQS should be FIFO and write a Lambda Function which will listen to SQS and compress the image and upload to some other S3 Bucket







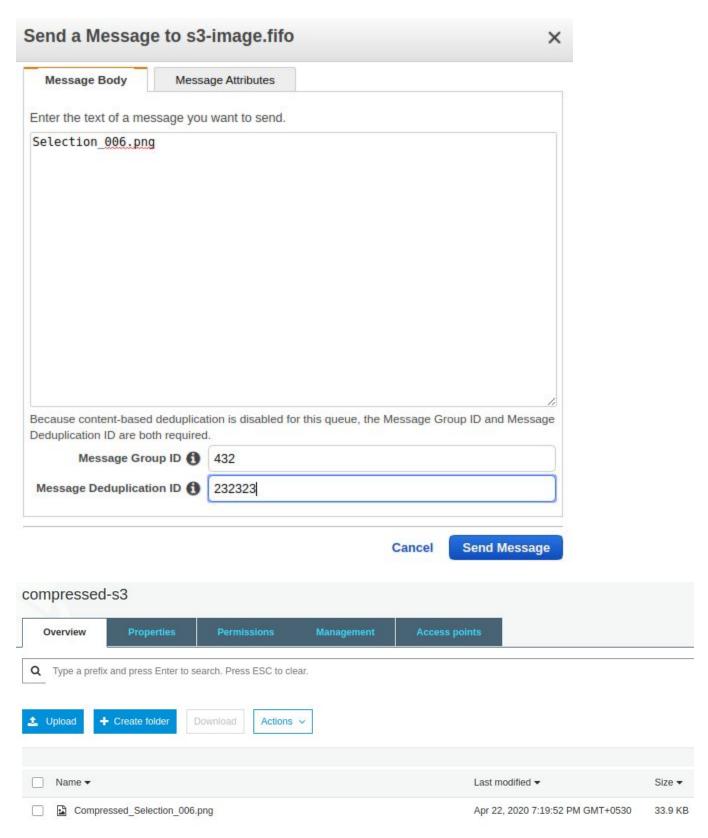
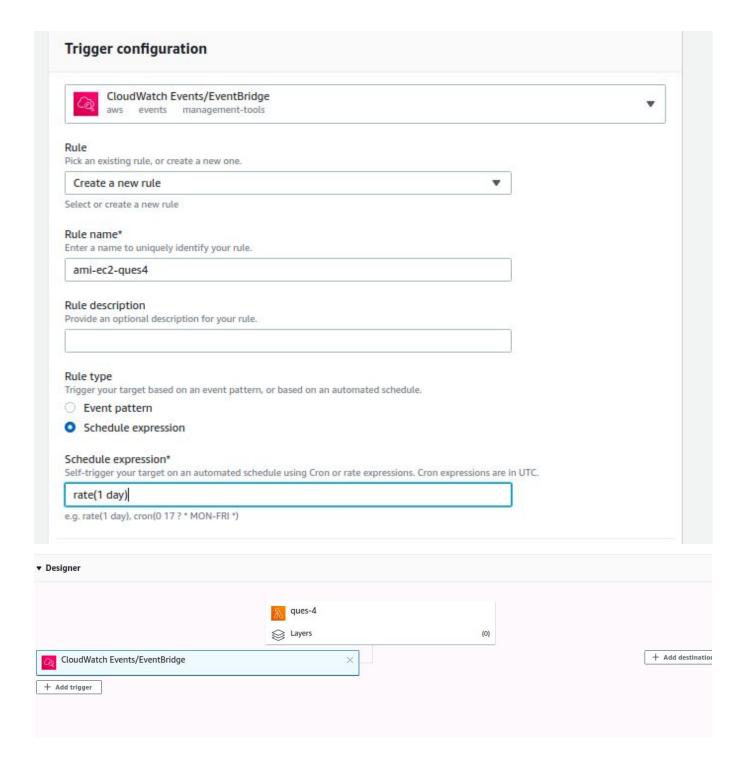
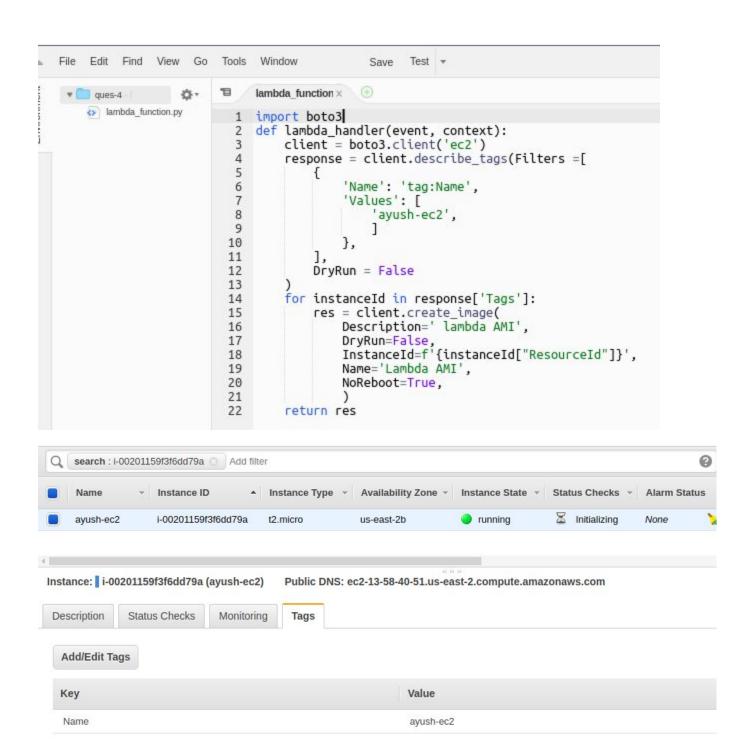
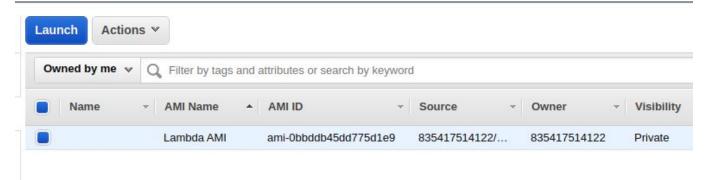


Image in s3->ques2 lambda-> sqs -> ques3 lambda-> new s3 compressed image

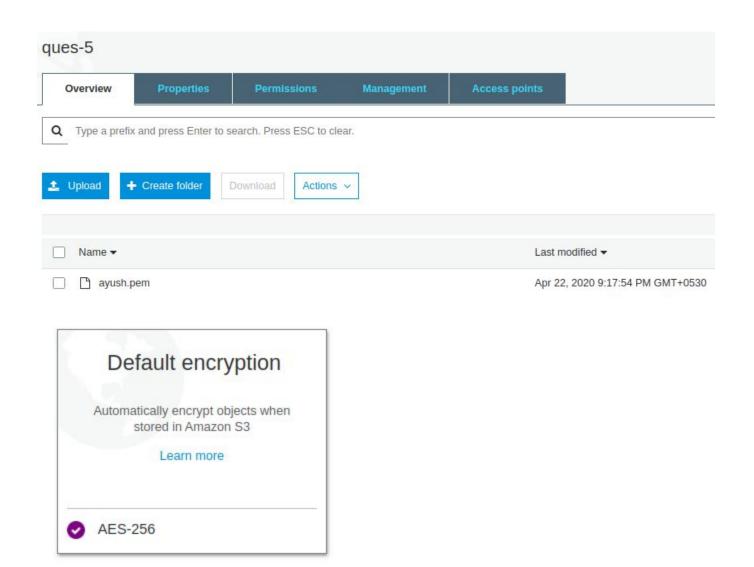
4. Create a Lambda functions which gets triggered daily and takes the AMI of a particular EC2 instance(Filter on the basis of Tag).







5. Create a Lambda function which will login to a EC2 instance and prints all the running services. (Use python's paramiko module to do SSH. Also, launch lambda in a VPC).(Keep Keys in S3 and S3 should be encrypted)



```
(ques-5) ayush@ayush:~/ques-5$ ls
                                                    paramiko
bcrvpt
                                                    paramiko-2.7.1.dist-info
bcrypt-3.1.7.dist-info
cffi
                                                      pycache
cffi-1.14.0.dist-info
                                                    pycparser
cffi backend.cpython-36m-x86 64-linux-gnu.so
                                                    pycparser-2.20.dist-info
                                                    PyNaCl-1.3.0.dist-info
cryptography
cryptography-2.9.1.dist-info
                                                     ques-5-s3.zip
                                                    six-1.14.0.dist-info
main.py
nacl
                                                    six.py
(ques-5) ayush@ayush:~/ques-5$ cat main.py
import paramiko
import boto3
def ssh(event,context):
   s3 = boto3.client('s3')
   s3.download_file('ques-5','ayush.pem','/tmp/ayush.pem')
   ayush = paramiko.RSAKey.from private key file('/tmp/ayush.pem')
   client = paramiko.SSHClient()
   client.set_missing_host_key_policy(paramiko.AutoAddPolicy())
   client.connect(hostname='13.58.40.51',username="ubuntu",pkey=ayush)
   stdin,stdout,stderr = client.exec_command('ps -eaf')
   print(stdout.read())
   client.close()
(ques-5) ayush@ayush:~/ques-5$
ques-5-s3
                                             Throttle Qualifiers ▼ Actions ▼ test
                                                                           ▼ Test
 The area below shows the result returned by your function execution. Learn more about returning results from your function
   null
```

