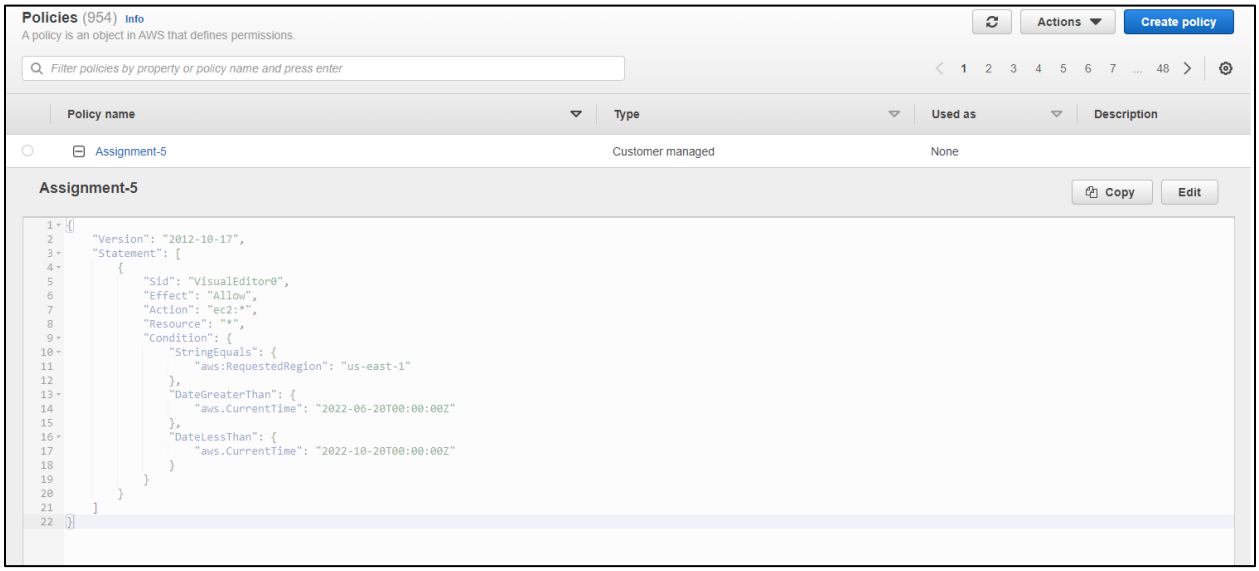
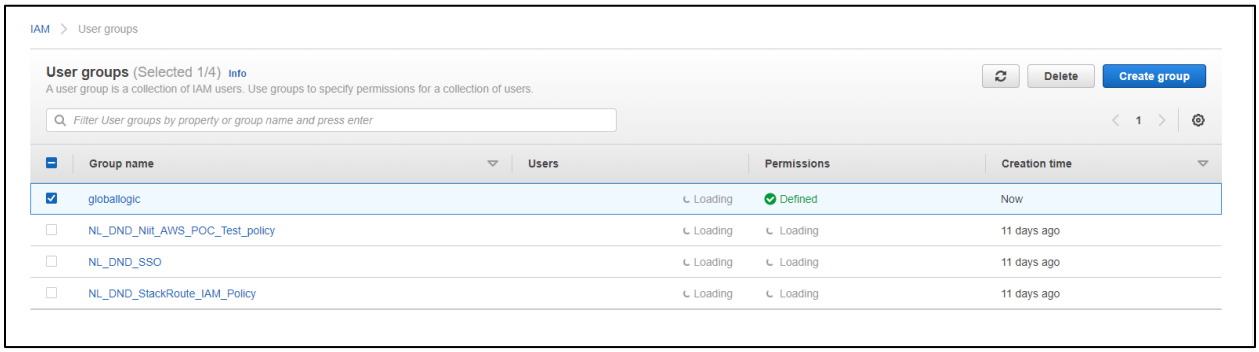
Assignment 5 :: IAM- create group called as globallogic and assign permission to launch EC2 instance only in us-east-1(any available region) with specific duration in daytime.

Step 1 :: Create Custom Policy from AWS console

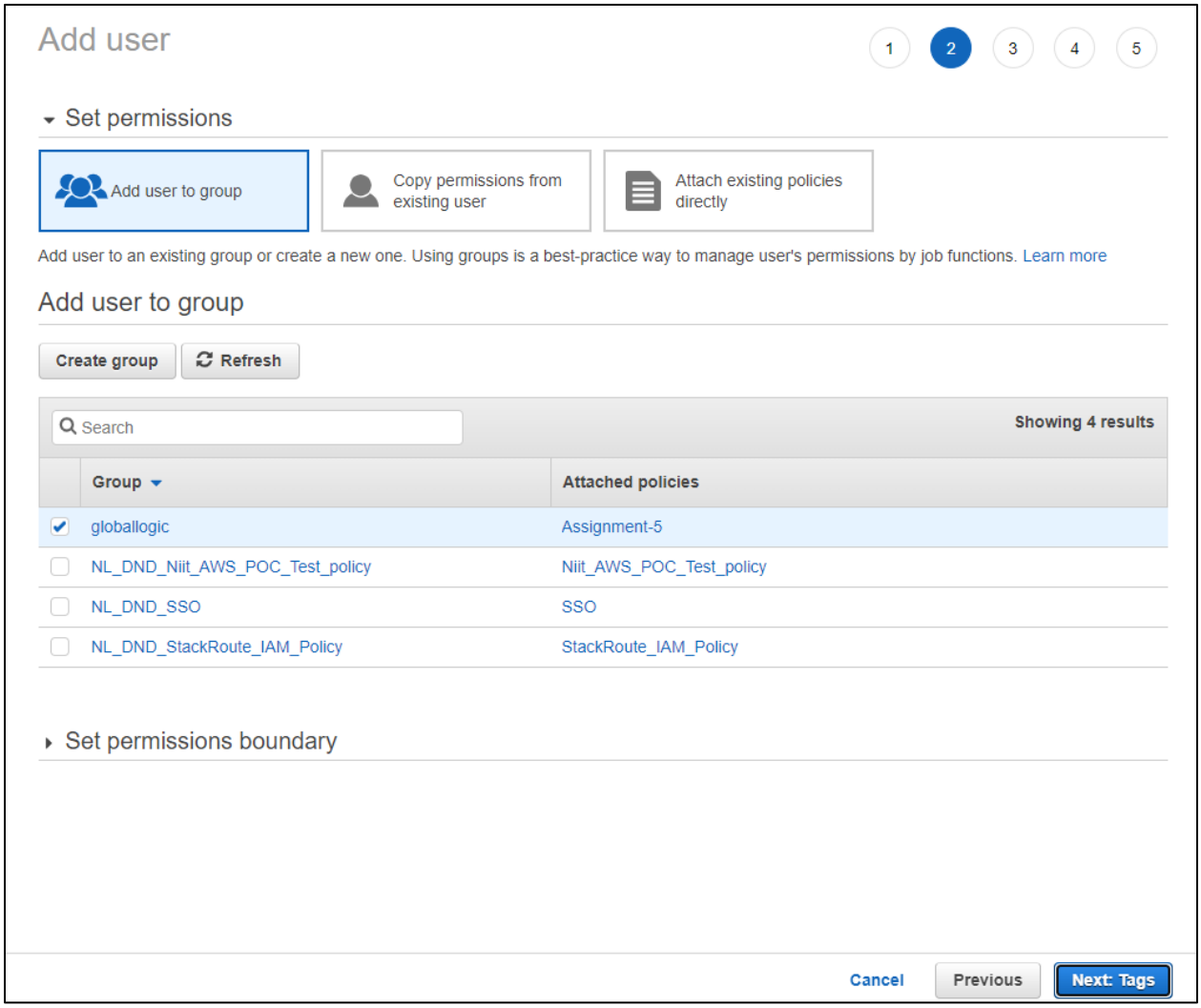


Step 2 :: Created User group named “globallogic” using custom policy “Assignment-5” created in step 1.



Step 3 :: Creating a test username “globallogictestuser” with custom policy

While creating the user, adding it to group “globallogic” created in step 2.



Add user

1 2 3 4 5

Review

Review your choices. After you create the user, you can view and download the autogenerated password and access key.

User details

User name	globallogictestuser
AWS access type	AWS Management Console access - with a password
Console password type	Autogenerated
Require password reset	Yes
Permissions boundary	Permissions boundary is not set

Permissions summary

The user shown above will be added to the following groups.

Type	Name
Group	globallogic

Tags

The new user will receive the following tag

Key	Value
Name	TestUser

Cancel Previous Create user

Add user

1 2 3 4 5

Users created but with errors

You successfully created the following users, but some problems remain. Expand the following section for details. View and download user's security credentials as well as email users instructions to log into the AWS Management Console. This will be the last time these credentials will be available to download. However, you can manage and recreate these credentials at any time.

Users with AWS Management Console access may sign-in at: https://271697867512.signin.aws.amazon.com/console

Download .csv

User
globallogictestuser

Created user globallogictestuser

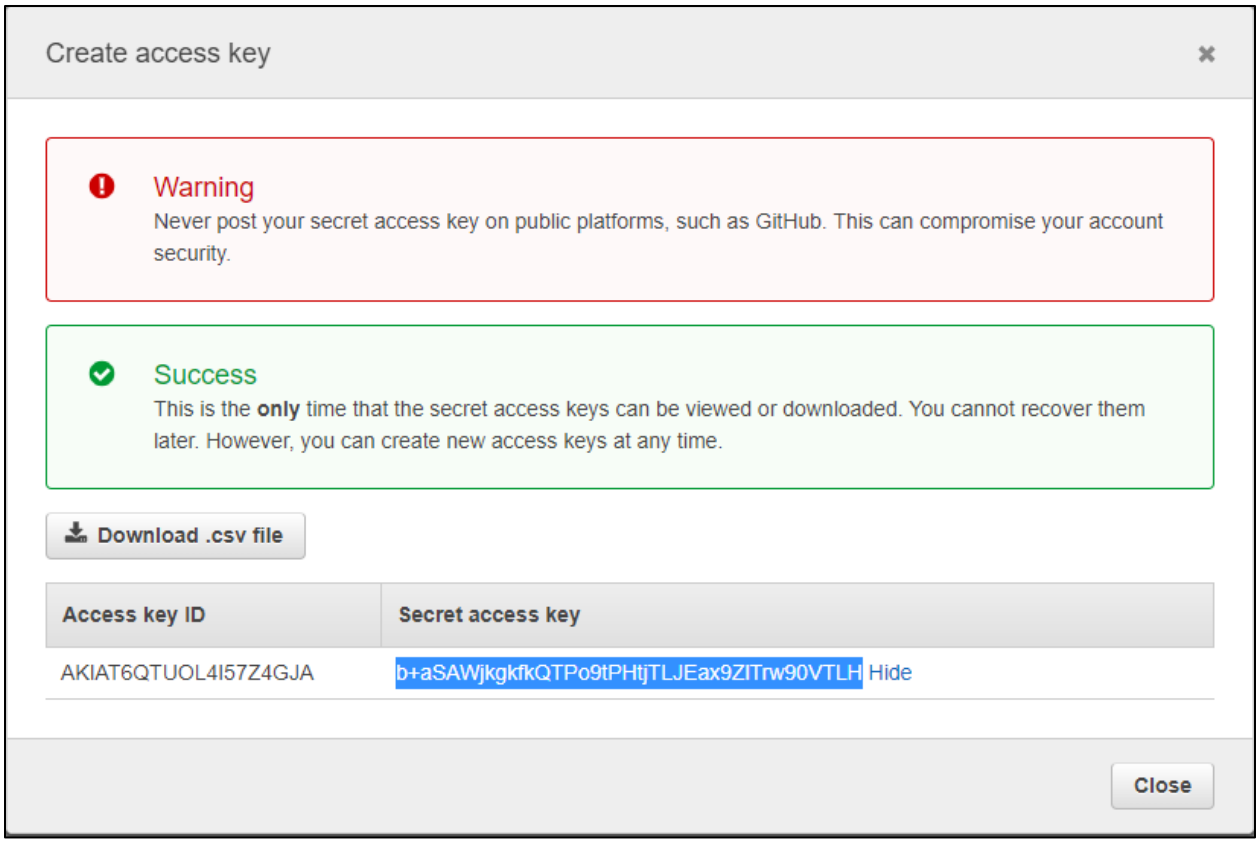
Added user globallogictestuser to group globallogic

Could not create login profile for user globallogictestuser:

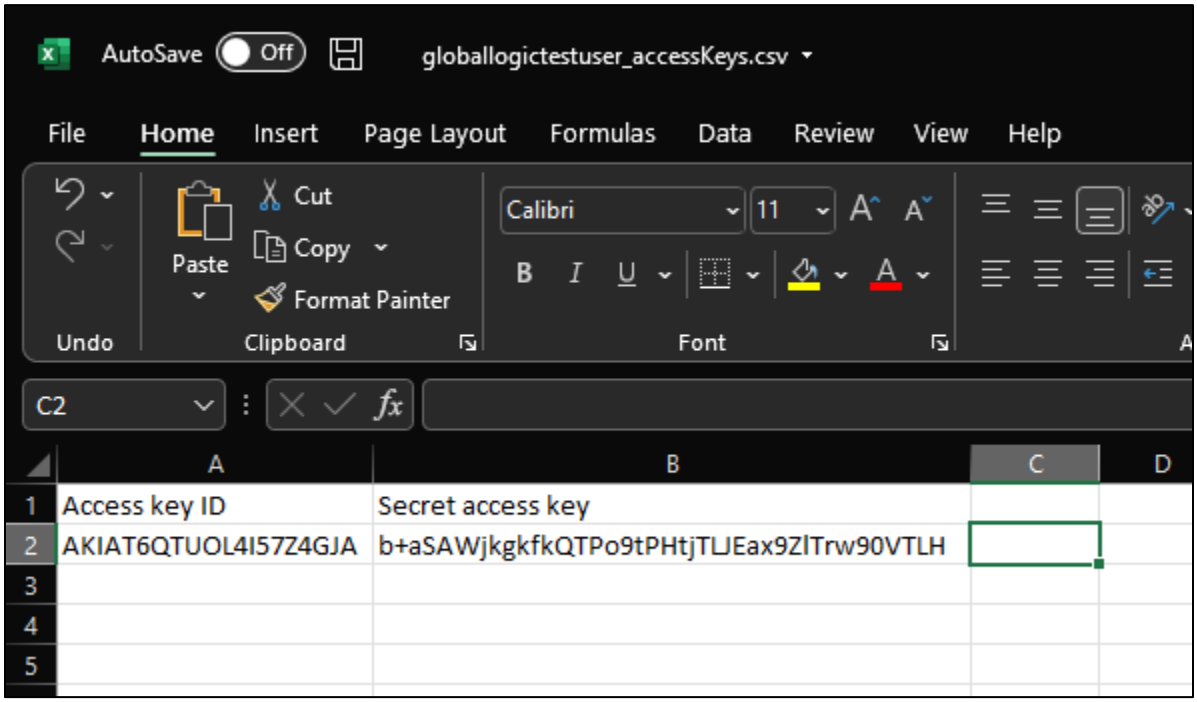
User: arn:aws:iam::271697867512:user/hari.gopalakrishnan@globallogic.com is not authorized to perform: iam:CreateLoginProfile on resource: user globallogictestuser with an explicit deny in an identity-based policy

Close

Step 4 :: Created AWS Access Key ID and secret access key



Step 5 :: aws configure using AWS Access Key ID for user “globallogictestuser”



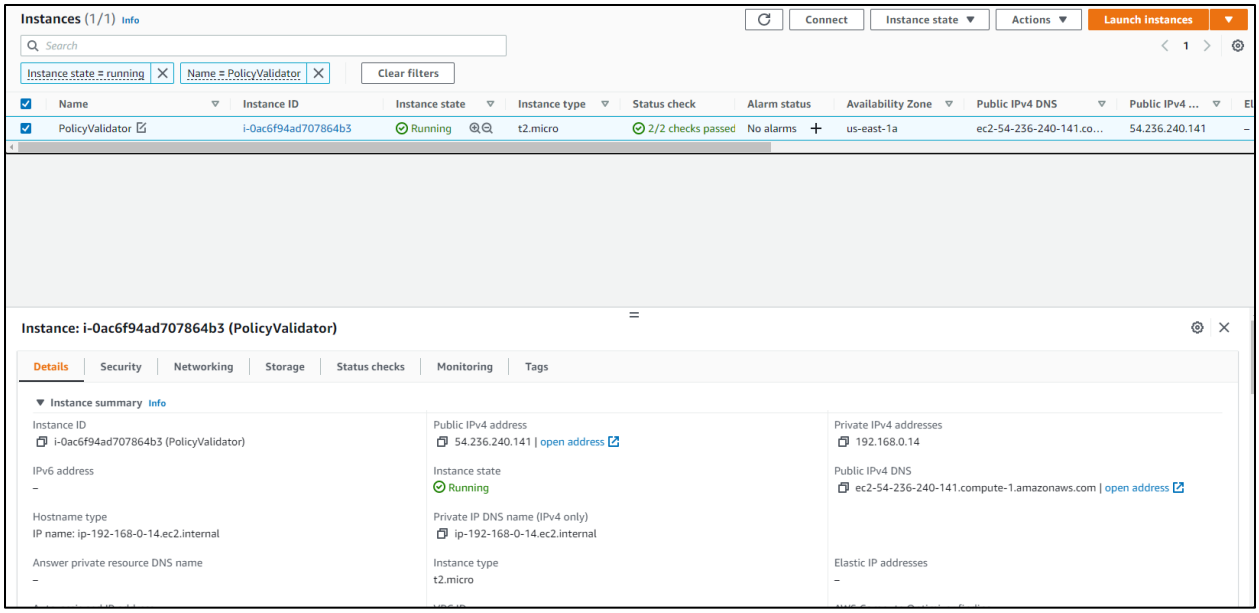
```
Administrator: Command Prompt

C:\Users\hari.gopalakrishnan>aws configure
AWS Access Key ID [****************LBVN]: AKIAT6QTUOL4I57Z4GJA
AWS Secret Access Key [****************vMkW]: 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
Default region name [us-east-1]: us-east-1
Default output format [None]:

C:\Users\hari.gopalakrishnan>_
```

Step 6 :: Creating EC2 instance via AWS CLI

```
C:\Users\hari.gopalakrishnan>aws ec2 run-instances --image-id ami-0cff7528ff583bf9a --count 1 --instance-type t2.micro --key-name DevOps --security-group-ids sg-0084c662da7a9e690 --subnet-id subnet-0b1da42a865748d33 --tag-specifications
ResourceType=instance,Tags=[{Key=Name,Value=PolicyValidator}]
{
    "Groups": [],
    "Instances": [
        {
            "AmiLaunchIndex": 0,
            "ImageId": "ami-0cff7528ff583bf9a",
            "InstanceId": "i-0ac6f94ad707864b3",
            "InstanceType": "t2.micro",
            "KeyName": "DevOps",
            "LaunchTime": "2022-06-21T10:34:58+00:00",
            "Monitoring": {
                "State": "disabled"
            },
            "Placement": {
                "AvailabilityZone": "us-east-1a",
                "GroupName": "",
                "Tenancy": "default"
            },
            "PrivateDnsName": "ip-192-168-0-14.ec2.internal",
            "PrivateIpAddress": "192.168.0.14",
            "ProductCodes": [],
            "PublicDnsName": "",
            "State": {
                "Code": 0,
                "Name": "pending"
            },
            "StateTransitionReason": "",
            "SubnetId": "subnet-0b1da42a865748d33",
            "VpcId": "vpc-04b0132b5469f9777",
            "Architecture": "x86_64",
            "BlockDeviceMappings": [],
            "ClientToken": "5155f2c8-cf5a-438b-998e-68a2df712724",
            "EbsOptimized": false,
            "EnaSupport": true,
            "Hypervisor": "xen",
            "NetworkInterfaces": [
                {
                    "Attachment": {
                        "AttachTime": "2022-06-21T10:34:58+00:00",
                        "AttachmentId": "eni-attach-07f9f362cc61a349d",
                        "DeleteOnTermination": true,
                        "DeviceIndex": 0,
                        "Status": "attaching",
                        "NetworkCardIndex": 0
                    },
                    "Description": "",
                    "Groups": [
                        {
                            "GroupName": "ssh_http_sg",
                            "GroupId": "sg-0084c662da7a9e690"
                        }
                    ],
                    "Ipv6Addresses": [],
                    "MacAddress": "02:b1:d1:03:9d:f1",
                    "NetworkInterfaceId": "eni-0be0b56608546cffc",
                    "OwnerId": "271697867512",
                    "PrivateDnsName": "ip-192-168-0-14.ec2.internal",
                    "PrivateIpAddress": "192.168.0.14",
```

Administrator: Command Prompt


```
                "PrivateIpAddress": "192.168.0.14",
                "PrivateIpAddresses": [
                    {
                        "Primary": true,
                        "PrivateDnsName": "ip-192-168-0-14.ec2.internal",
                        "PrivateIpAddress": "192.168.0.14"
                    }
                ],
                "SourceDestCheck": true,
                "Status": "in-use",
                "SubnetId": "subnet-0b1da42a865748d33",
                "VpcId": "vpc-04b0132b5469f9777",
                "InterfaceType": "interface"
            }
        ],
        "RootDeviceName": "/dev/xvda",
        "RootDeviceType": "ebs",
        "SecurityGroups": [
            {
                "GroupName": "ssh_http_sg",
                "GroupId": "sg-0084c662da7a9e690"
            }
        ],
        "SourceDestCheck": true,
        "StateReason": {
            "Code": "pending",
            "Message": "pending"
        },
        "Tags": [
            {
                "Key": "Name",
                "Value": "PolicyValidator"
            }
        ],
        "VirtualizationType": "hvm",
        "CpuOptions": {
            "CoreCount": 1,
            "ThreadsPerCore": 1
        },
        "CapacityReservationSpecification": {
            "CapacityReservationPreference": "open"
        },
        "MetadataOptions": {
            "State": "pending",
            "HttpTokens": "optional",
            "HttpPutResponseHopLimit": 1,
            "HttpEndpoint": "enabled",
            "HttpProtocolIpv6": "disabled",
            "InstanceMetadataTags": "disabled"
        },
        "EnclaveOptions": {
            "Enabled": false
        },
        "PrivateDnsNameOptions": {
            "HostnameType": "ip-name",
            "EnableResourceNameDnsARecord": false,
            "EnableResourceNameDnsAAAARecord": false
        },
        "MaintenanceOptions": {
            "AutoRecovery": "default"
        }
    }
],
```



This confirms that IAM user can launch the instances

Negative Case:

Changing the date lower than today and try the same launch instance

Permissions | Policy usage | Tags | Policy versions | Access Advisor

Policy summary | { } JSON | Edit policy

```
1  {
2      "Version": "2012-10-17",
3      "Statement": [
4          {
5              "Sid": "VisualEditor0",
6              "Effect": "Allow",
7              "Action": "ec2:*",
8              "Resource": "*",
9              "Condition": {
10                 "StringEquals": {
11                     "aws:RequestedRegion": "us-east-1"
12                 },
13                 "DateLessThanIfExists": {
14                     "aws:CurrentTime": "2022-06-20T00:00:00Z"
15                 },
16                 "DateGreaterThanIfExists": {
17                     "aws:CurrentTime": "2022-06-20T00:00:00Z"
18                 }
19             }
20         }
21     ]
22 }
```

```
C:\Users\hari.gopalakrishnan>aws ec2 run-instances --image-id ami-0cff7528ff583bf9a --count 1 --instance-type t2.micro --key-name DevOps --security-group-ids sg-0084c662da7a9e690 --subnet-id subnet-0b1da42a865748d33 --tag-specifications
ResourceType=instance,Tags=[{Key=Name,Value=PolicyValidator-1}]

An error occurred (UnauthorizedOperation) when calling the RunInstances operation: You are not authorized to perform this operation. Encoded authorization failure message: 2af93Omwl6cRM04ANRL-oQeS6NwhTQdMl81w5TlvdEfv1-iilbK7Mr7nIr9rPO84g
NCSMByNL_25Vy_tajnesf6aB5PXBz]E2VaXDlhQJ_kMrPdgO9pylrRJjh6nzmPAoBqnad_MFRXQE-mzziVRV6RaIgxLqAMyMpZtnOyZRa0s4dIkC5RGHBpVjpHdh3AyIPmC6jQDM56GteKXBaZoJAuFAvVCtZddtnpoPuYFn6zy9eUaBLi32X6ABHkZgeETaGYeJaFHqesyJgPw65s52XmZLCvd952y-8V3YKvRYdVW
SNCUPmCkWykt_2-aKFOoHqnjY8NyVSWxXy31EOeEJQM2zOmAZoZuL4gvhZstEuUNEqBDZaHlIPQWd9wd6AeJF4_2AZyqf8gqKMn0bB6icSeUWmv1VZhXSAOmZVRh4dS5HwcINofYiiKc6Isd-QAsHhZwVzSgVuUPfmXc5B07Xs3pq82gEA50TFmr1iRYRpQKCPA5o57K7mydgZE8BwyDFkBw5-dnqcc_9CXZDLiPxjRgn
vLpsg2qdoXabukwwLb6O_6QikegxvkVnII5vGjNdwNyXDkE5M0MIDGuPyGSxoPSegvBavX_IOJ8rEJC3T7KzxuVrUKPf4_UZtEgvUZAtq0feWnm0IHUonzYDaHwyU3aQz_CDbuz3lDLyx

C:\Users\hari.gopalakrishnan>
```