To access S3 from CLI by using shell script

Step 1:

- 1. Launch the instance
- 2. Select the IAM service
 - Create one user
 - Give AWS S3 full access permissions
 - Create access key and secret key in user
- 3. Connect the instance directly

Step 2:

- 1. Create one new file with shell script extension (.sh) Ex: vi shellscript.sh
- 2. Give executable permissions to the file (shellscript.sh)
- 3. Chmod 777 shellscript.sh it can provide complete permissions to the file

Commands	
#!/bin/bash	To write script
aws configure	It provides keys
aws s3 ls	To list the buckets
free	To check memory space
nproc	To check CPUs in server
ps -ef	To check CPU processor

4. it is shown in below figure

```
aws
        Services
                    Q Search
                                                                             [Alt+S]

⟨⟨¬⟩ VPC
                    IAM
                         1 S3
 1 #!/bin/bash
 2 aws configure
 3 echo list of S3 buckets
  aws s3 ls
 5 echo To check the memory
 6 free
 7 echo To check the cpus
8 nproc
  echo To check the processors
10 ps -ef
11
12
```

- 5. Save and quit from editor
- 6. Type sh ./shellscript.sh to execute the file
- 7. The file can execute all the steps automatically by shell script as shown in below figure

```
Services Q Search
                                                                                                          [Alt+S]
            VPC 🔠 IAM 📴 S3
AWS Access Key ID [**************YVWO]:
AWS Secret Access Key [*************Wdht]:
Default region name [ap-south-1]:
Default output format [json]:
list of S3 buckets
2024-10-21 09:03:39 abhi10
2024-10-21 09:05:20 niti10
To check the memory
total
                                                                        shared buff/cache
                                                                                                       available
                                     185808
                                                       418200
                    972268
                                                                                          368260
                                                                                                           637020
Swap:
To check the cpus
To check the processors
                                    C STIME TTY
0 08:42 ?
0 08:42 ?
UID
                  PID
                            PPID
                                                                    TIME CMD
                     1 2
                                                              00:00:01 /usr/lib/systemd/systemd --switched-root --system --deserialize=32 00:00:00 [kthreadd]
root
                                 00
root
                                                                           [rcu_gp]
[rcu_par_gp]
[slub_flushwq]
[netns]
                                     0 08:42 ?
                                                              00:00:00
root
                                2
                                     0 08:42 ?
                                                              00:00:00
root
                                        08:42 ?
                                                              00:00:00
root
                                     0 08:42
                                                              00:00:00
root
                                        08:42
                                                              00:00:00
                                                                           [kworker/0:0H-events_highpri]
root
                                                                           [mm_percpu_wq]
[rcu_tasks_kthread]
[rcu_tasks_rude_kthread]
[rcu_tasks_trace_kthread]
[ksoftirqd/0]
                    10
                                     0 08:42
                                                              00:00:00
root
                                 2222222
                                     0 08:42 ?
0 08:42 ?
root
                    11
12
13
14
15
                                                              00:00:00
                                                              00:00:00
root
                                     0 08:42 ?
root
                                                              00:00:00
                                     0 08:42 ?
root
                                                                           [rcu_preempt]
[migration/0]
                                     0 08:42
                                                              00:00:00
root
                    16
18
                                                              00:00:00
                                     0 08:42
root
                                                                           [cpuhp/0]
[kdevtmpfs]
[inet_frag_wq]
                                     0 08:42
                                                 ?
                                                              00:00:00
root
                                     0
                                        08:42
                                                              00:00:00
root
                                     0
                                        08:42
                                                              00:00:00
root
                                                              00:00:00
```

Step 3:

1. To list the instances we use this command

```
aws ec2 describe-instances
```

2. It is shown in below script shell figure

```
aws
         Services
                    Q Search
                                                                           [Alt+S]
  EC2 🕝 VPC
                 E IAM
                        FF 53
!/bin/bash
aws configure
echo list of buckets
aws s3 ls
echo to check memory
free
echo to check cpus
nproc
echo to check memory
#to list the ec2 instances
aws ec2 describe-instances
```

- 3. Return to the terminal
- 4. Execute the file then you see the list of instances as shown in below figure

```
Services Q Search
                                                                                                                                                                                                        [Alt+S]
            EC2
                        🔐 VPC 🔠 IAM 📴 S3
                                                     2768 0 03:56 pts/1
2 0 04:00 ?
2769 0 04:01 pts/1
2995 0 04:01 pts/1
                                2769
                                                                                                                      00:00:00 -bash
                                                                                                                     00:00:00 [tls-strp]
00:00:00 [bin/bash ./file.sh
00:00:00 ps -ef
root
                               2983
2995
root
                                3006
 coot
          "Reservations": [
                               "Groups": [],
"Instances": [
                                                     "AmiLaunchIndex": 0,
"ImageId": "ami-04a37924ffe27da53",
"InstanceId": "i-0ffd76aeb0571c35c",
"InstanceType": "t2.micro",
"KeyName": "password",
"LaunchTime": "2024-10-23T03:50:48+00:00",
"Monitoring": {
    "State": "disabled"
                                                     },
"Placement": {
    "AvailabilityZone": "ap-south-lb",
    "GroupName": "",
    "Tenancy": "default"
                                                     PrivateDnsName": "ip-172-31-3-249.ap-south-1.compute.internal",
"PrivateIpAddress": "172.31.3.249",
"ProductCodes": [],
"PublicDnsName": "ec2-3-110-40-11.ap-south-1.compute.amazonaws.com",
"PublicIpAddress": "3.110.40.11",
"State": {
    "Code": 16,
    "Name": "running"
```