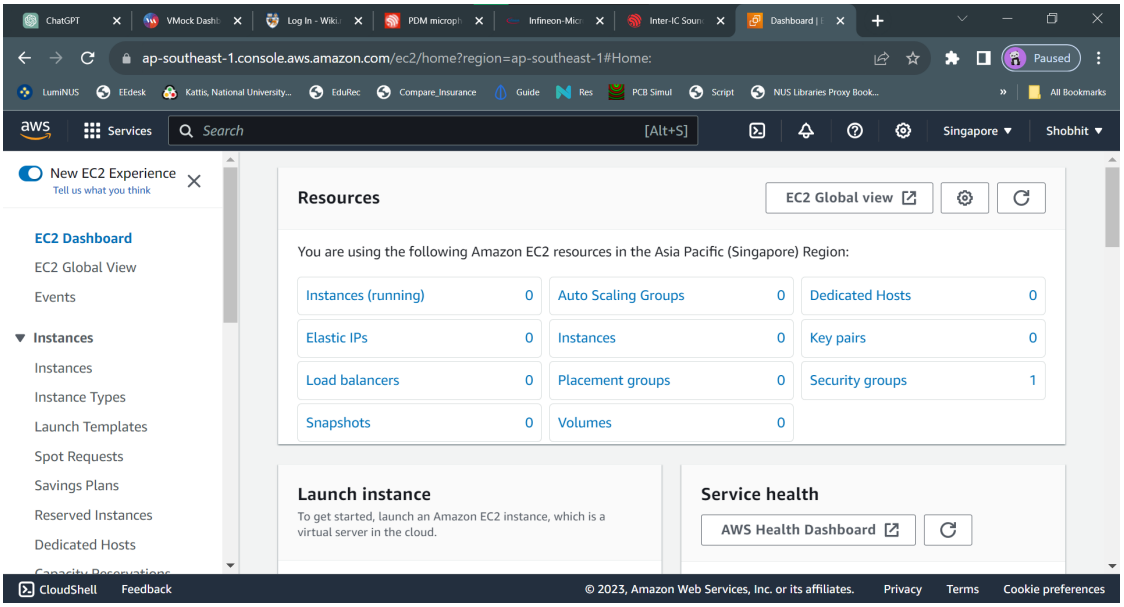
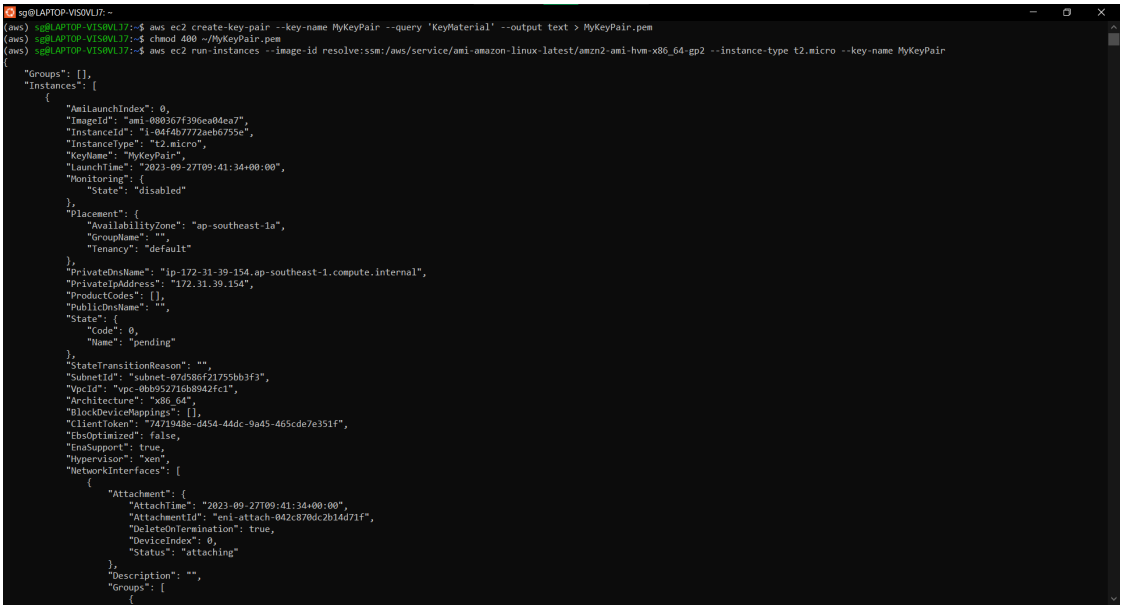
EE3801 LAB 3

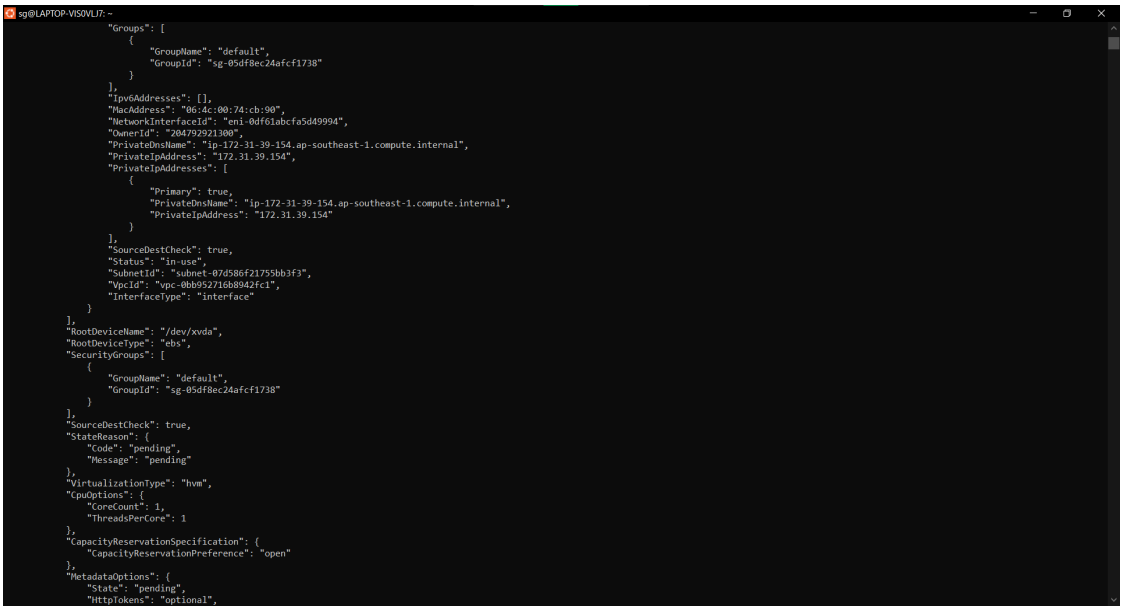
AY 2023/24

Submitted by

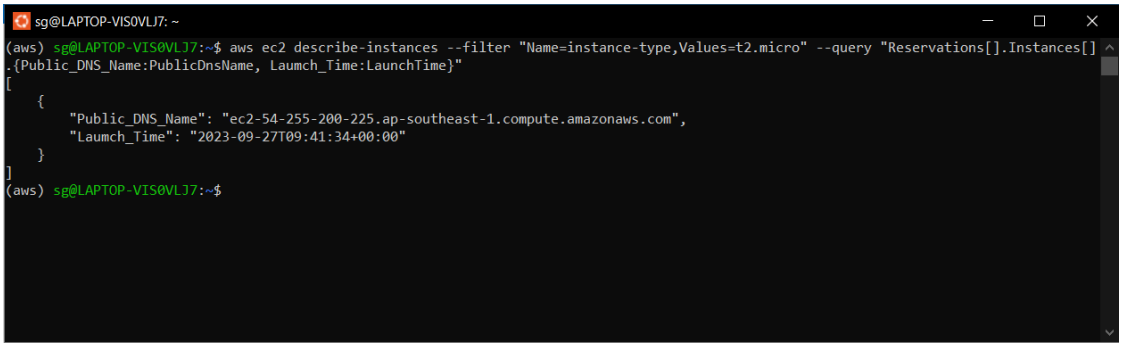
Gulati Shobhit (A0244507H)

Question	Dataframe
2b	`input_df`
2c	`result`
2e	`result_item_prod_df`

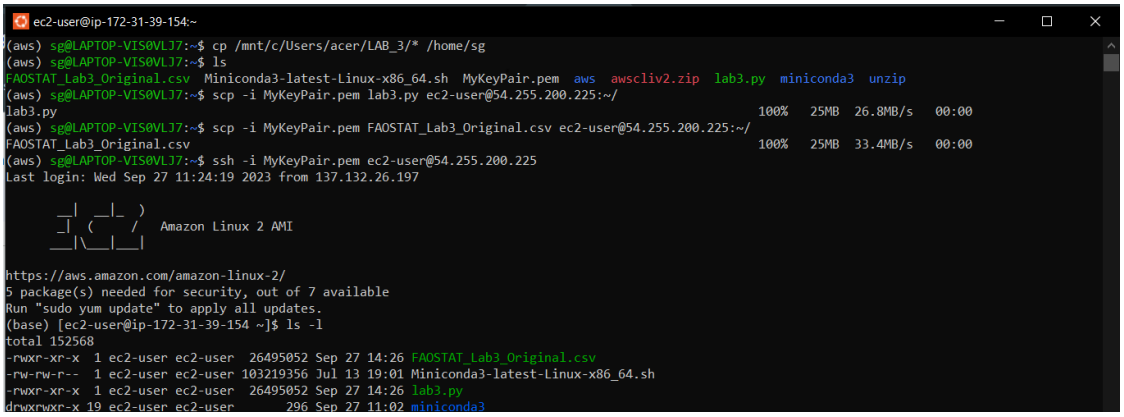
Question	Screenshot
1.	
3.	


sg@LAPTOP-VIS0VLJ7: ~
"Groups": [
{
"GroupName": "default",
"GroupId": "sg-05df8ec24afcf1738"
}
],
"Ipv6Addresses": [],
"MacAddress": "06:4c:00:74:cb:90",
"NetworkInterfaceId": "eni-0df61abcfa5d49994",
"OwnerId": "204792921300",
"PrivateDnsName": "ip-172-31-39-154.ap-southeast-1.compute.internal",
"PrivateIpAddress": "172.31.39.154",
"PrivateIpAddresses": [
{
"Primary": true,
"PrivateDnsName": "ip-172-31-39-154.ap-southeast-1.compute.internal",
"PrivateIpAddress": "172.31.39.154"
}
],
"SourceDestCheck": true,
"Status": "in-use",
"SubnetId": "subnet-07d586f21755bbb3f3",
"VpcId": "vpc-0bb952716b8942fc1",
"InterfaceType": "interface"
}
],
"RootDeviceName": "/dev/xvda",
"RootDeviceType": "ebs",
"SecurityGroups": [
{
"GroupName": "default",
"GroupId": "sg-05df8ec24afcf1738"
}
],
"SourceDestCheck": true,
"StateReason": {
"Code": "pending",
"Message": "pending"
},
"VirtualizationType": "hvm",
"CpuOptions": {
"CoreCount": 1,
"ThreadsPerCore": 1
},
"CapacityReservationSpecification": {
"CapacityReservationPreference": "open"
},
"MetadataOptions": {
"State": "pending",
"HttpTokens": "optional",
sg@LAPTOP-VIS0VLJ7: ~
"OwnerId": "204792921300",
"PrivateDnsName": "ip-172-31-39-154.ap-southeast-1.compute.internal",
"PrivateIpAddress": "172.31.39.154",
"PrivateIpAddresses": [
{
"Primary": true,
"PrivateDnsName": "ip-172-31-39-154.ap-southeast-1.compute.internal",
"PrivateIpAddress": "172.31.39.154"
}
],
"SourceDestCheck": true,
"Status": "in-use",
"SubnetId": "subnet-07d586f21755bbb3f3",
"VpcId": "vpc-0bb952716b8942fc1",
"InterfaceType": "interface"
}
],
"RootDeviceName": "/dev/xvda",
"RootDeviceType": "ebs",
"SecurityGroups": [
{
"GroupName": "default",
"GroupId": "sg-05df8ec24afcf1738"
}
],
"SourceDestCheck": true,
"StateReason": {
"Code": "pending",
"Message": "pending"
},
"VirtualizationType": "hvm",
"CpuOptions": {
"CoreCount": 1,
"ThreadsPerCore": 1
},
"CapacityReservationSpecification": {
"CapacityReservationPreference": "open"
},
"MetadataOptions": {
"State": "pending",
"HttpTokens": "optional",
"HttpPutResponseHopLimit": 1,
"HttpEndpoint": "enabled"
}
}
],
"OwnerId": "204792921300",
"ReservationId": "r-0dc30e6ff57f57b72"
}
(aws) sg@LAPTOP-VIS0VLJ7:~$

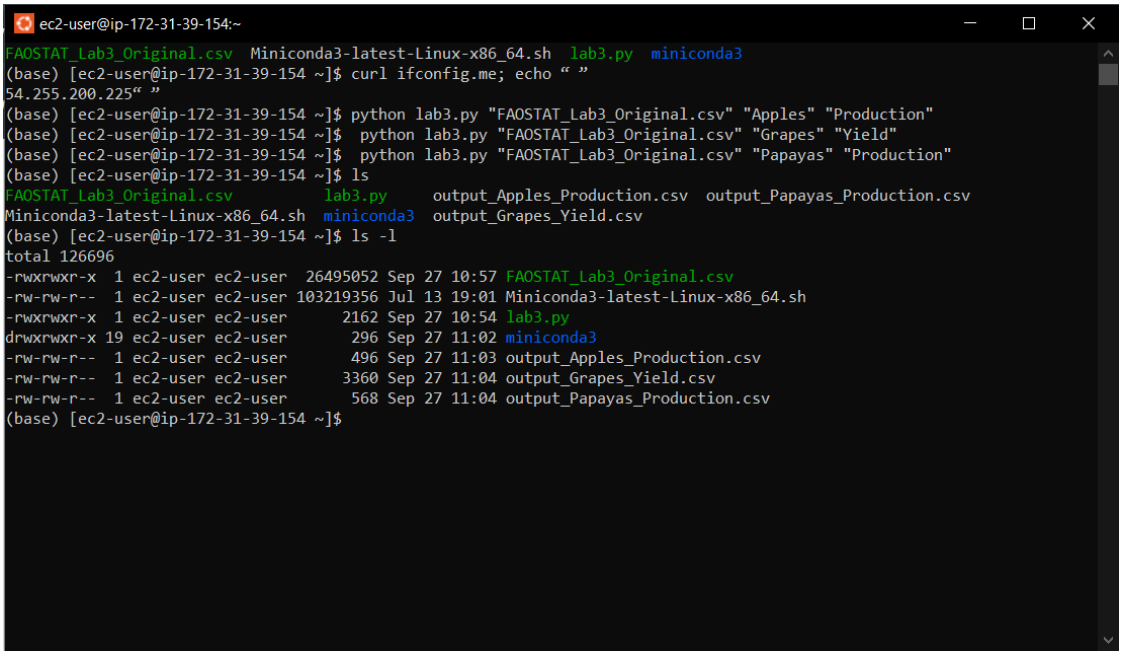
4.


sg@LAPTOP-VIS0VLJ7: ~
(aws) sg@LAPTOP-VIS0VLJ7:~$ aws ec2 describe-instances --filter "Name=instance-type,Values=t2.micro" --query "Reservations[].Instances[]
.{Public_DNS_Name:PublicDnsName, Laumch_Time:LaunchTime}"
[
{
"Public_DNS_Name": "ec2-54-255-200-225.ap-southeast-1.compute.amazonaws.com",
"Laumch_Time": "2023-09-27T09:41:34+00:00"
}
]
(aws) sg@LAPTOP-VIS0VLJ7:~$

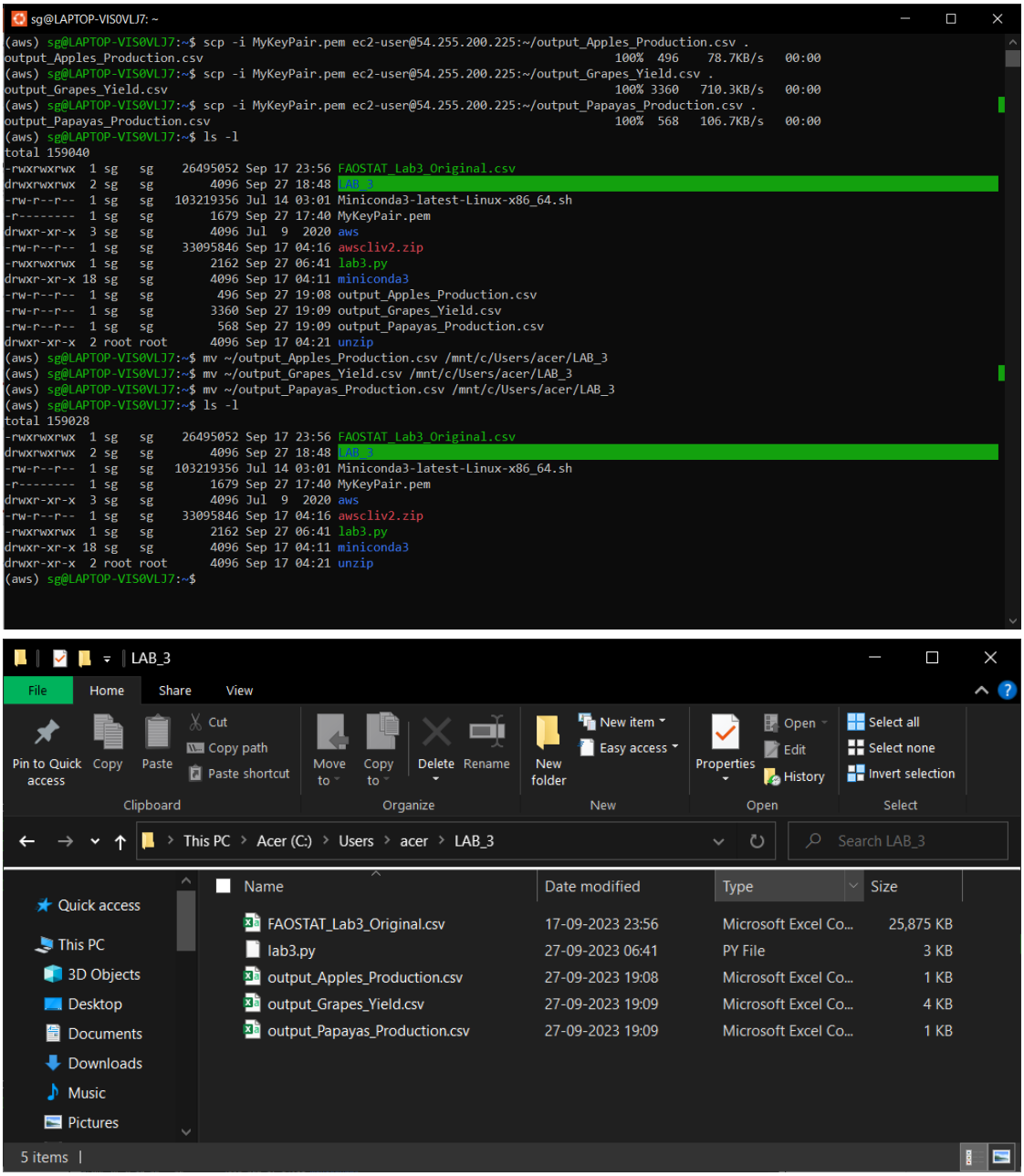
5.


ec2-user@ip-172-31-39-154:~
(aws) sg@LAPTOP-VIS0VLJ7:~$ cp /mnt/c/Users/acer/LAB_3/* /home/sg
(aws) sg@LAPTOP-VIS0VLJ7:~$ ls
FAOSTAT_Lab3_Original.csv Miniconda3-latest-Linux-x86_64.sh MyKeyPair.pem aws awscliv2.zip lab3.py miniconda3 unzip
(aws) sg@LAPTOP-VIS0VLJ7:~$ scp -i MyKeyPair.pem lab3.py ec2-user@54.255.200.225:~/
lab3.py 100% 25MB 26.8MB/s 00:00
(aws) sg@LAPTOP-VIS0VLJ7:~$ scp -i MyKeyPair.pem FAOSTAT_Lab3_Original.csv ec2-user@54.255.200.225:~/
FAOSTAT_Lab3_Original.csv 100% 25MB 33.4MB/s 00:00
(aws) sg@LAPTOP-VIS0VLJ7:~$ ssh -i MyKeyPair.pem ec2-user@54.255.200.225
Last login: Wed Sep 27 11:24:19 2023 from 137.132.26.197
__| __|_)
_| (/ Amazon Linux 2 AMI
___|___|___|
https://aws.amazon.com/amazon-linux-2/
5 package(s) needed for security, out of 7 available
Run "sudo yum update" to apply all updates.
(base) [ec2-user@ip-172-31-39-154 ~]$ ls -l
total 152568
-rwxr-xr-x 1 ec2-user ec2-user 26495052 Sep 27 14:26 FAOSTAT_Lab3_Original.csv
-rw-rw-r-- 1 ec2-user ec2-user 103219356 Jul 13 19:01 Miniconda3-latest-Linux-x86_64.sh
-rwxr-xr-x 1 ec2-user ec2-user 26495052 Sep 27 14:26 lab3.py
drwxrwxr-x 19 ec2-user ec2-user 296 Sep 27 11:02 miniconda3

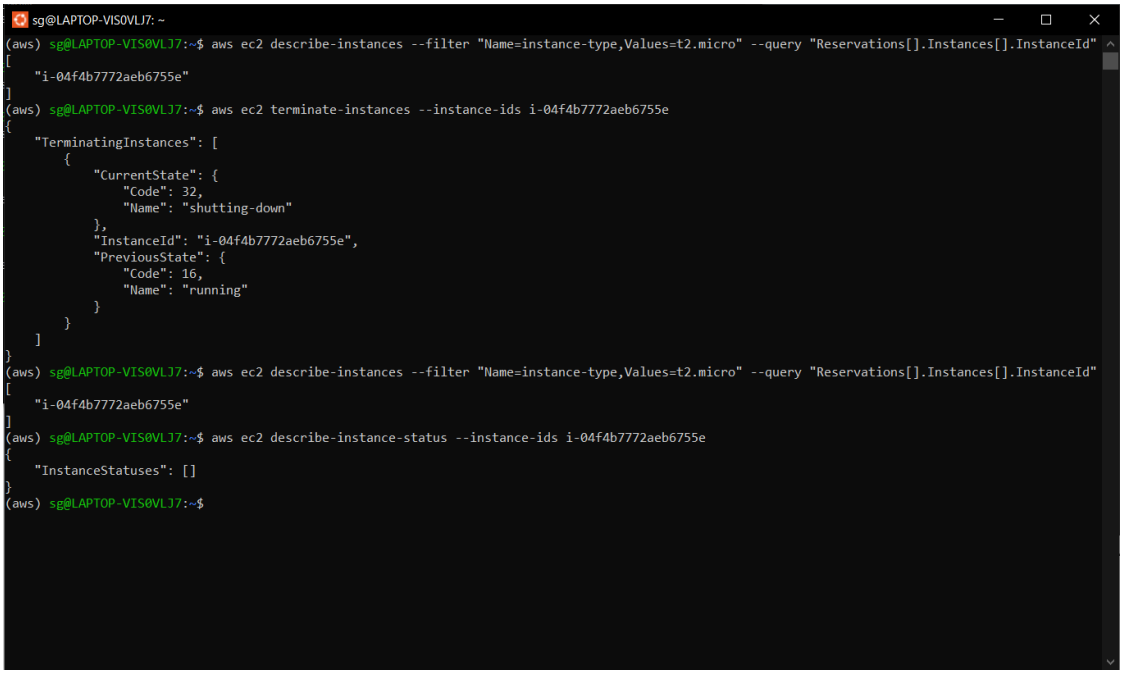
7.

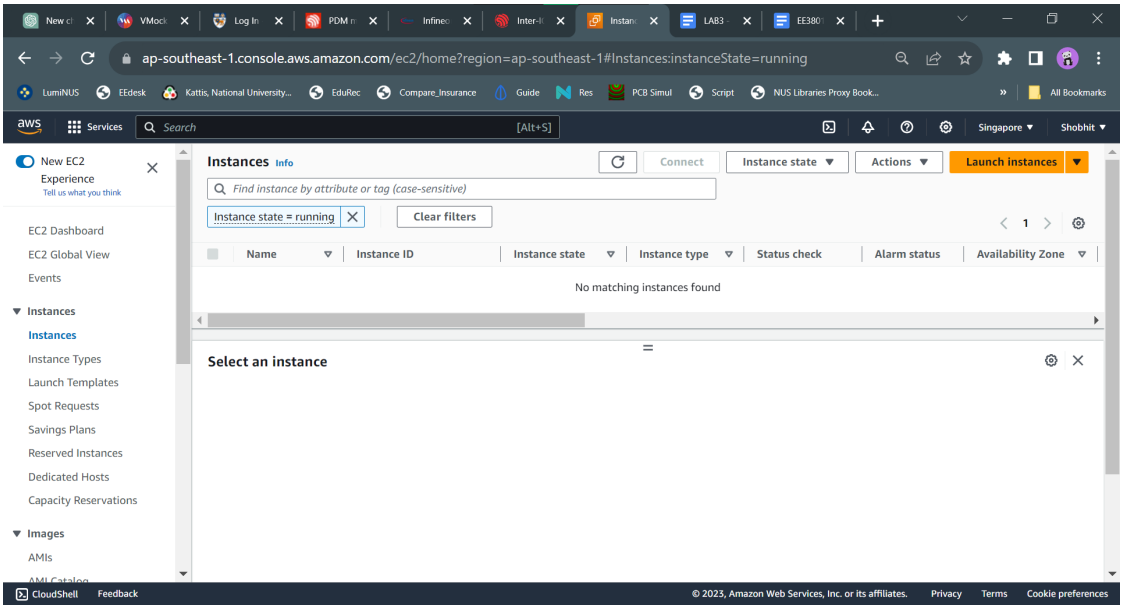

ec2-user@ip-172-31-39-154:~
FAOSTAT_Lab3_Original.csv Miniconda3-latest-Linux-x86_64.sh lab3.py miniconda3
(base) [ec2-user@ip-172-31-39-154 ~]$ curl ifconfig.me; echo " "
54.255.200.225" "
(base) [ec2-user@ip-172-31-39-154 ~]$ python lab3.py "FAOSTAT_Lab3_Original.csv" "Apples" "Production"
(base) [ec2-user@ip-172-31-39-154 ~]$ python lab3.py "FAOSTAT_Lab3_Original.csv" "Grapes" "Yield"
(base) [ec2-user@ip-172-31-39-154 ~]$ python lab3.py "FAOSTAT_Lab3_Original.csv" "Papayas" "Production"
(base) [ec2-user@ip-172-31-39-154 ~]$ ls
FAOSTAT_Lab3_Original.csv lab3.py output_Apples_Production.csv output_Papayas_Production.csv
Miniconda3-latest-Linux-x86_64.sh miniconda3 output_Grapes_Yield.csv
(base) [ec2-user@ip-172-31-39-154 ~]$ ls -l
total 126696
-rwxrwxr-x 1 ec2-user ec2-user 26495052 Sep 27 10:57 FAOSTAT_Lab3_Original.csv
-rw-rw-r-- 1 ec2-user ec2-user 103219356 Jul 13 19:01 Miniconda3-latest-Linux-x86_64.sh
-rwxrwxr-x 1 ec2-user ec2-user 2162 Sep 27 10:54 lab3.py
drwxrwxr-x 19 ec2-user ec2-user 296 Sep 27 11:02 miniconda3
-rw-rw-r-- 1 ec2-user ec2-user 496 Sep 27 11:03 output_Apples_Production.csv
-rw-rw-r-- 1 ec2-user ec2-user 3360 Sep 27 11:04 output_Grapes_Yield.csv
-rw-rw-r-- 1 ec2-user ec2-user 568 Sep 27 11:04 output_Papayas_Production.csv
(base) [ec2-user@ip-172-31-39-154 ~]$

8.


sg@LAPTOP-VIS0VLJ7: ~
(aws) sg@LAPTOP-VIS0VLJ7:~$ scp -i MyKeyPair.pem ec2-user@54.255.200.225:~/output_Apples_Production.csv .
output_Apples_Production.csv 100% 496 78.7KB/s 00:00
(aws) sg@LAPTOP-VIS0VLJ7:~$ scp -i MyKeyPair.pem ec2-user@54.255.200.225:~/output_Grapes_Yield.csv .
output_Grapes_Yield.csv 100% 3360 710.3KB/s 00:00
(aws) sg@LAPTOP-VIS0VLJ7:~$ scp -i MyKeyPair.pem ec2-user@54.255.200.225:~/output_Papayas_Production.csv .
output_Papayas_Production.csv 100% 568 106.7KB/s 00:00
(aws) sg@LAPTOP-VIS0VLJ7:~$ ls -l
total 159040
-rwxrwxrwx 1 sg sg 26495052 Sep 17 23:56 FAOSTAT_Lab3_Original.csv
drwxrwxrwx 2 sg sg 4096 Sep 27 18:48 LAB_3
-rw-r--r-- 1 sg sg 103219356 Jul 14 03:01 Miniconda3-latest-Linux-x86_64.sh
-r-------- 1 sg sg 1679 Sep 27 17:40 MyKeyPair.pem
drwxr-xr-x 3 sg sg 4096 Jul 9 2020 aws
-rw-r--r-- 1 sg sg 33095846 Sep 17 04:16 awscliv2.zip
-rwxrwxrwx 1 sg sg 2162 Sep 27 06:41 lab3.py
drwxr-xr-x 18 sg sg 4096 Sep 17 04:11 miniconda3
-rw-r--r-- 1 sg sg 496 Sep 27 19:08 output_Apples_Production.csv
-rw-r--r-- 1 sg sg 3360 Sep 27 19:09 output_Grapes_Yield.csv
-rw-r--r-- 1 sg sg 568 Sep 27 19:09 output_Papayas_Production.csv
drwxr-xr-x 2 root root 4096 Sep 17 04:21 unzip
(aws) sg@LAPTOP-VIS0VLJ7:~$ mv ~/output_Apples_Production.csv /mnt/c/Users/acer/LAB_3
(aws) sg@LAPTOP-VIS0VLJ7:~$ mv ~/output_Grapes_Yield.csv /mnt/c/Users/acer/LAB_3
(aws) sg@LAPTOP-VIS0VLJ7:~$ mv ~/output_Papayas_Production.csv /mnt/c/Users/acer/LAB_3
(aws) sg@LAPTOP-VIS0VLJ7:~$ ls -l
total 159028
-rwxrwxrwx 1 sg sg 26495052 Sep 17 23:56 FAOSTAT_Lab3_Original.csv
drwxrwxrwx 2 sg sg 4096 Sep 27 18:48 LAB_3
-rw-r--r-- 1 sg sg 103219356 Jul 14 03:01 Miniconda3-latest-Linux-x86_64.sh
-r-------- 1 sg sg 1679 Sep 27 17:40 MyKeyPair.pem
drwxr-xr-x 3 sg sg 4096 Jul 9 2020 aws
-rw-r--r-- 1 sg sg 33095846 Sep 17 04:16 awscliv2.zip
-rwxrwxrwx 1 sg sg 2162 Sep 27 06:41 lab3.py
drwxr-xr-x 18 sg sg 4096 Sep 17 04:11 miniconda3
drwxr-xr-x 2 root root 4096 Sep 17 04:21 unzip
(aws) sg@LAPTOP-VIS0VLJ7:~$
LAB_3
File
Home
Share
View
Pin to Quick access
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New item
Easy access
New folder
New
Properties
Open
Edit
History
Open
Select all
Select none
Invert selection
Select
This PC
Acer (C:)
Users
acer
LAB_3
Search LAB_3
Quick access
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Name
Date modified
Type
Size
FAOSTAT_Lab3_Original.csv 17-09-2023 23:56 Microsoft Excel Co... 25,875 KB
lab3.py 27-09-2023 06:41 PY File 3 KB
output_Apples_Production.csv 27-09-2023 19:08 Microsoft Excel Co... 1 KB
output_Grapes_Yield.csv 27-09-2023 19:09 Microsoft Excel Co... 4 KB
output_Papayas_Production.csv 27-09-2023 19:09 Microsoft Excel Co... 1 KB
5 items

10.


sg@LAPTOP-VIS0VLJ7: ~
(aws) sg@LAPTOP-VIS0VLJ7:~$ aws ec2 describe-instances --filter "Name=instance-type,Values=t2.micro" --query "Reservations[].Instances[].InstanceId"
[
"i-04f4b7772aeb6755e"
]
(aws) sg@LAPTOP-VIS0VLJ7:~$ aws ec2 terminate-instances --instance-ids i-04f4b7772aeb6755e
{
"TerminatingInstances": [
{
"CurrentState": {
"Code": 32,
"Name": "shutting-down"
},
"InstanceId": "i-04f4b7772aeb6755e",
"PreviousState": {
"Code": 16,
"Name": "running"
}
}
]
}
(aws) sg@LAPTOP-VIS0VLJ7:~$ aws ec2 describe-instances --filter "Name=instance-type,Values=t2.micro" --query "Reservations[].Instances[].InstanceId"
[
"i-04f4b7772aeb6755e"
]
(aws) sg@LAPTOP-VIS0VLJ7:~$ aws ec2 describe-instance-status --instance-ids i-04f4b7772aeb6755e
{
"InstanceStatuses": []
}
(aws) sg@LAPTOP-VIS0VLJ7:~$


ap-southeast-1.console.aws.amazon.com/ec2/home?region=ap-southeast-1#Instances:instanceState=running
Services
Search
[Alt+S]
Singapore
Shobhit
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
Instances Info
Connect
Instance state
Actions
Launch instances
Find instance by attribute or tag (case-sensitive)
Instance state = running
Clear filters
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
No matching instances found
Select an instance
CloudShell
Feedback
© 2023, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences