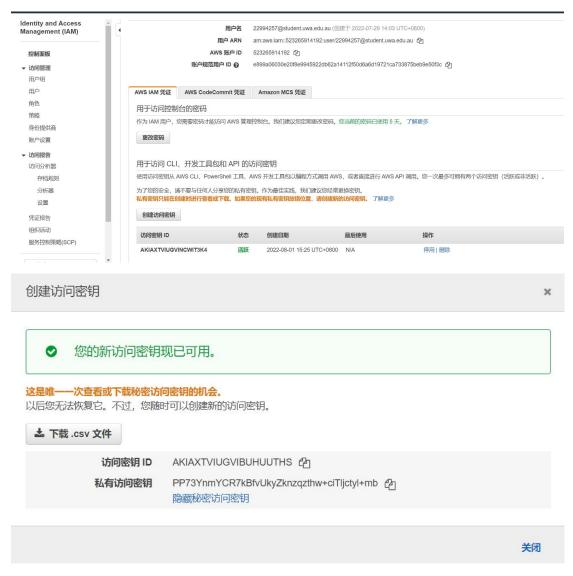
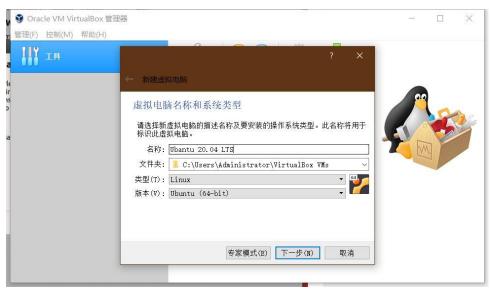
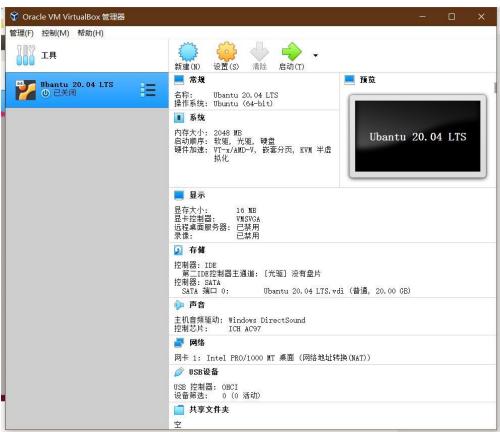
Lab1 Week2

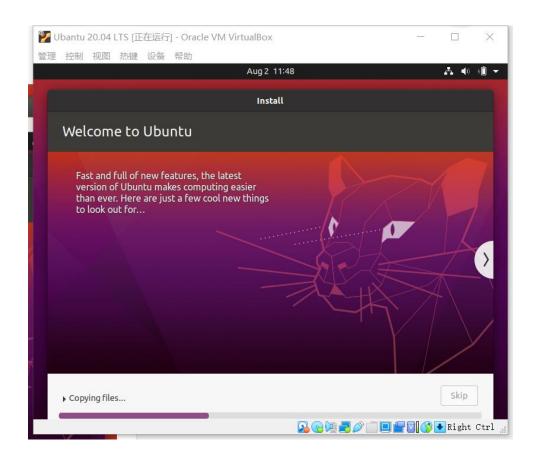
AWS Accounts and Log In



Virtual Box and Ubuntu VM







AWSCLI, Boto and Python 3.8.x

```
mjieli@mjieli-VirtualBox:~$ python3 -V
Python 3.8.10

/usr/ttb/pythons/utst-packages (from botocore==1.27.40->
Installing collected packages: botocore, awscli
  Attempting uninstall: botocore
  Found existing installation: botocore 1.27.43
  Uninstalling botocore-1.27.43:
    Successfully uninstalled botocore-1.27.43
Attempting uninstall: awscli
  Found existing installation: awscli 1.25.43
  Uninstalling awscli-1.25.43:
    Successfully uninstalled awscli-1.25.43
Successfully installed awscli-1.25.46
```

Exploring and testing the environment

```
mjieli@mjieli-VirtualBox:~$ aws ec2 describe-regions --output table

DescribeRegions

Regions

Endpoint | OptInStatus | RegionName

Endpoint | OptInStatus | RegionName

ec2.eu-north-1.amazonaws.com | opt-in-not-required | eu-north-1

ec2.ap-south-1.amazonaws.com | opt-in-not-required | ap-south-1

ec2.eu-west-3.amazonaws.com | opt-in-not-required | eu-west-3

ec2.eu-west-2.amazonaws.com | opt-in-not-required | eu-west-2

ec2.eu-west-1.amazonaws.com | opt-in-not-required | eu-west-1

ec2.eu-west-1.amazonaws.com | opt-in-not-required | eu-west-1

ec2.ap-northeast-3.amazonaws.com | opt-in-not-required | ap-northeast-3
```

```
mjieli@mjieli-VirtualBox:~$ pwd
/home/mjieli
mjieli@mjieli-VirtualBox:~$ mkdir lab1
mjieli@mjieli-VirtualBox:~$ cd lab1
mjieli@mjieli-VirtualBox:~/lab1$ touch lab1.py

mjieli@mjieli-Virt
import boto3
ec2 = boto3.client('ec2')
response = ec2.describe_regions()
print(response)
```

```
mjieli@mjieli-VirtualBox:~/lab1$ python3 lab1.py
{'Regions': [{'Endpoint': 'ec2.eu-north-1.amazonaws.com', 'RegionName': 'eu-nor
th-1', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.ap-south-1.amaz
onaws.com', 'RegionName': 'ap-south-1', 'OptInStatus': 'opt-in-not-required'},
{'Endpoint': 'ec2.eu-west-3.amazonaws.com', 'RegionName': 'eu-west-3', 'OptInSt atus': 'opt-in-not-required'}, {'Endpoint': 'ec2.eu-west-2.amazonaws.com', 'RegionName': 'eu-west-2', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.eu-west-2', 'Opt-in-not-required'}
.eu-west-1.amazonaws.com', 'RegionName': 'eu-west-1', 'OptInStatus': 'opt-in-no
t-required'}, {'Endpoint': 'ec2.ap-northeast-3.amazonaws.com', 'RegionName': 'a
p-northeast-3', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.ap-northeast-2.amazonaws.com', 'RegionName': 'ap-northeast-2', 'OptInStatus': 'opt-in
-not-required'}, {'Endpoint': 'ec2.ap-northeast-1.amazonaws.com', 'RegionName': 'ap-northeast-1', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.sa-east-1.amazonaws.com', 'RegionName': 'sa-east-1', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.ca-central-1.amazonaws.com', 'RegionName': 'ca-cent
 ral-1', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.ap-southeast-1
.amazonaws.com', 'RegionName': 'ap-southeast-1', 'OptInStatus': 'opt-in-not-req
uired'}, {'Endpoint': 'ec2.ap-southeast-2.amazonaws.com', 'RegionName': 'ap-southeast-2', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.eu-central-1.amazonaws.com', 'RegionName': 'eu-central-1', 'OptInStatus': 'opt-in-not-required'
ired'}, {'Endpoint': 'ec2.us-east-1.amazonaws.com', 'RegionName': 'us-east-1', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'ec2.us-east-2.amazonaws.com', 'RegionName': 'us-east-2', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'us-east-1', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'us-east-1', 'Us-east-2', 'OptInStatus': 'opt-in-not-required'}, {'Endpoint': 'us-east-2', 'Us-east-2'
        ieli@mjieli-VirtualBox:~$ pip install pandas
Collecting pandas
        Downloading pandas-1.4.3-cp38-cp38-manylinux_2_17_x86_64.manylinux2014_x86_64
   .whl (11.7 MB)
                                                                                                                             | 11.7 MB 2.3 MB/s
 Collecting python-dateutil>=2.8.1
        Downloading python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
                                                                                                                            | 247 kB 1.5 MB/s
 Collecting pytz>=2020.1
        Downloading pytz-2022.1-py2.py3-none-any.whl (503 kB)
                                                                                                                              | 503 kB 1.2 MB/s
 Collecting numpy>=1.18.5; platform machine != "aarch64" and platform machine !=
       'arm64" and python_version < "3.10"
        Downloading numpy-1.23.1-cp38-cp38-manylinux_2_17_x86_64.manylinux2014_x86_64
  .whl (17.1 MB)
                                                                                                                           | 17.1 MB 4.1 MB/s
 Requirement already satisfied: six>=1.5 in /usr/lib/python3/dist-packages (from
    python-dateutil>=2.8.1->pandas) (1.14.0)
  Installing collected packages: python-dateutil, pytz, numpy, pandas
 Successfully installed numpy-1.23.1 pandas-1.4.3 python-dateutil-2.8.2 pytz-202
import boto3
ec2 = boto3.client('ec2')
response = ec2.describe regions()
from tabulate import tabulate
```

print(tabulate(dict(response["Regions"]),headers=headers, tablefmt="fancy_grid")

headers = ["Endpoint", "RegionName"]

DescribeRegions Regions		
ec2.eu-north-1.amazonaws.com	opt-in-not-required	eu-north-1
ec2.ap-south-1.amazonaws.com	opt-in-not-required	ap-south-1
ec2.eu-west-3.amazonaws.com	opt-in-not-required	eu-west-3
ec2.eu-west-2.amazonaws.com	opt-in-not-required	eu-west-2
ec2.eu-west-1.amazonaws.com	opt-in-not-required	eu-west-1
ec2.ap-northeast-3.amazonaws.com	opt-in-not-required	ap-northeast-3
ec2.ap-northeast-2.amazonaws.com	opt-in-not-required	ap-northeast-2
ec2.ap-northeast-1.amazonaws.com	opt-in-not-required	ap-northeast-1
ec2.sa-east-1.amazonaws.com	opt-in-not-required	sa-east-1
ec2.ca-central-1.amazonaws.com	opt-in-not-required	ca-central-1
ec2.ap-southeast-1.amazonaws.com	opt-in-not-required	ap-southeast-1
ec2.ap-southeast-2.amazonaws.com	opt-in-not-required	ap-southeast-2
ec2.eu-central-1.amazonaws.com	opt-in-not-required	eu-central-1
ec2.us-east-1.amazonaws.com	opt-in-not-required	us-east-1
ec2.us-east-2.amazonaws.com	opt-in-not-required	us-east-2
ec2.us-west-1.amazonaws.com	opt-in-not-required	us-west-1
ec2.us-west-2.amazonaws.com	opt-in-not-required	us-west-2