

# BOTO3

## Part 1 Installation and Configuration

I opened an IDE on Cloud9, configured before using boto3. In order to see aws cli version 'aws --version'

To install Boto3 typed 'pip install boto3 '.

```
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.7/site-packages (from python-dateutil<3.0.0,>=2.1->botocore<1.30.0,>=1.29.161->boto3) (1.16.0)  
Installing collected packages: botocore, s3transfer, boto3  
Successfully installed boto3-1.26.161 botocore-1.29.161 s3transfer-0.6.1
```

To see installed packages 'pip freeze

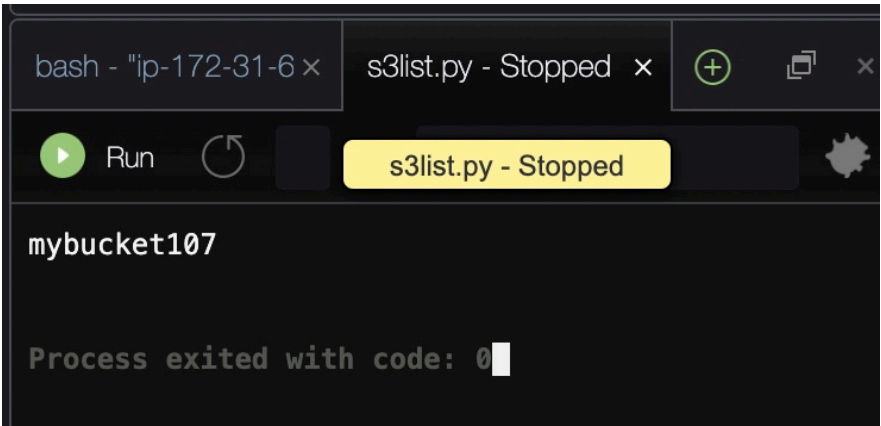
```
Umit:~/environment $ pip freeze  
astroid==2.3.3  
aws-cfn-bootstrap==2.0  
backcall==0.2.0  
boto3==1.26.161  
botocore==1.29.161  
decorator==5.1.1  
Django==2.0.2  
docutils==0.14  
git-remote-codecommit==1.16  
ikp3db==1.4.1  
importlib-metadata==6.7.0  
ipython==7.34.0  
isort==4.3.21  
jedi==0.18.2  
jmespath==1.0.1  
lazy-object-proxy==1.4.3  
lockfile==0.11.0  
matplotlib-inline==0.1.6  
mccabe==0.6.1  
parso==0.8.3  
pbr==5.11.1  
pexpect==4.8.0  
pickleshare==0.7.5  
prompt-toolkit==3.0.38  
ptyprocess==0.7.0  
Pygments==2.15.1  
pylint==2.4.4  
pylint-django==2.3.0  
pylint-flask==0.6  
pylint-plugin-utils==0.8.2  
pystache==0.5.4  
python-daemon==2.2.3  
python-dateutil==2.8.2  
pytz==2023.3  
s3transfer==0.6.1
```

## Part 2 Example of Boto3 usage

I create a file called s3list.py and put the code.

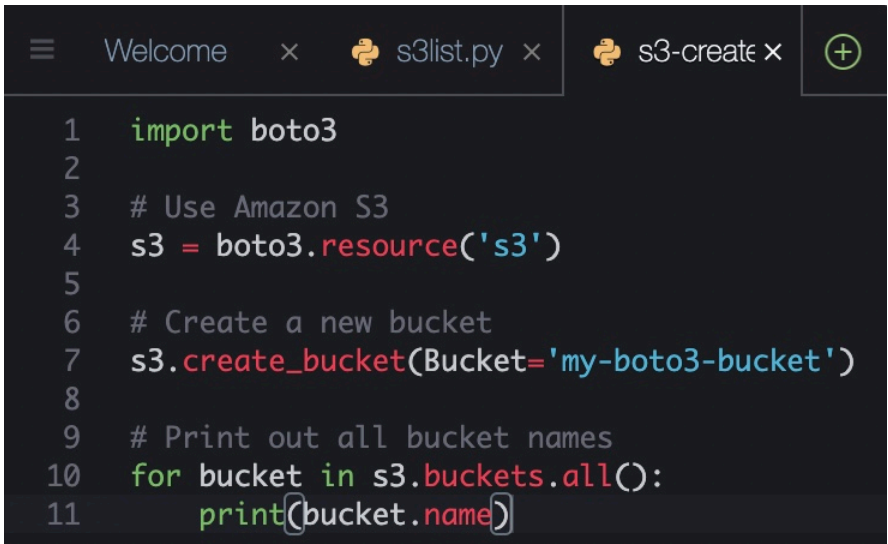
```
1 import boto3  
2  
3 # Use Amazon S3  
4 s3 = boto3.resource('s3')  
5  
6 # Print out all bucket names  
7 for bucket in s3.buckets.all():  
8     print(bucket.name)
```

After creating a bucket called mybucket107 and then hit on the run button you can see your bucket on Cloud9.

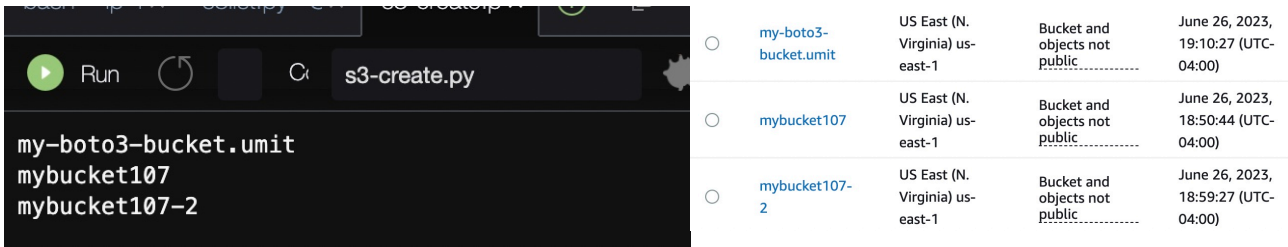


Create an S3 bucket and list buckets again

I create a python file called s3-create.py and copied the code.



You can see the new bucket



## Upload a file to the S3 Bucket

I create a file called test.txt on Boto3 and I created a file called s3-upload.py and paste the code was given.

```
1 import boto3
2
3 # Use Amazon S3
4 s3 = boto3.resource('s3')
5
6 # Upload a new file
7 data = open('test.txt', 'rb')
8 s3.Bucket('my-boto3-bucket').put_object(Key='test.txt', Body=data)
```

In the my-boto3-bucket.uit file, test.txt file uploaded after click on run.

<input type="checkbox"/>	Name ▲	Type ▼	Last modified ▼	Size ▼	Storage class
<input type="checkbox"/>	 test.txt	txt	June 26, 2023, 19:22:54 (UTC-04:00)	8.0 B	Standard

## Launch, Stop and Terminate Instances

I created a file called ec2-launch.py and launch Ubuntu instance. You can also change the instance ID to create different types of instances.

```
1 import boto3
2 ec2 = boto3.resource('ec2')
3
4 # create a new EC2 instance
5 instances = ec2.create_instances(
6     ImageId='ami-09e67e426f25ce0d7', # ubuntu ami id
7     MinCount=1,
8     MaxCount=1,
9     InstanceType='t2.micro',
10     KeyName='b107-key' # put your keypair
11 )
```

The code had initiated an instance.

<input type="checkbox"/>	Name ▼	Instance ID	Instance state
<input type="checkbox"/>	aws-cloud9-ortam-319b719cd4d...	i-Ofd4d115bcc518b5f	Running

To stop EC2 instance via boto3, I created a file called ec2-stop.py and put the code already given. I put my instance id.

```
1 import boto3
2 ec2 = boto3.resource('ec2')
3 ec2.Instance('i-0fd4d115bcc518b5f').stop() # put your instance id
```

After hit on run, the instance had stopped.

Instances (2) Info					Connect	Inst
Find instance by attribute or tag (case-sensitive)						
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type		
<input type="checkbox"/>	-	i-0c68926359f32994b	⏸ Stopping	t2.micro		
<input type="checkbox"/>	aws-cloud9-ortam-319b719cd4d...	i-0fd4d115bcc518b5f	✅ Running	t2.micro		

To terminate EC2 instance via boto3, I created a file called ec2-terminate.py and put the code already given. I put my instance id.

```
1 import boto3
2 ec2 = boto3.resource('ec2')
3 ec2.Instance('your InstanceID').terminate() # put your instance id
```

After hit on run, the instance had terminated.

Instances (2) Info					Connect	Instance
Find instance by attribute or tag (case-sensitive)						
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type		
<input type="checkbox"/>	-	i-0c68926359f32994b	⊖ Terminated	t2.micro		
<input type="checkbox"/>	aws-cloud9-ortam-319b719cd4d...	i-0fd4d115bcc518b5f	✅ Running	t2.micro		

