

Joy Kaufman

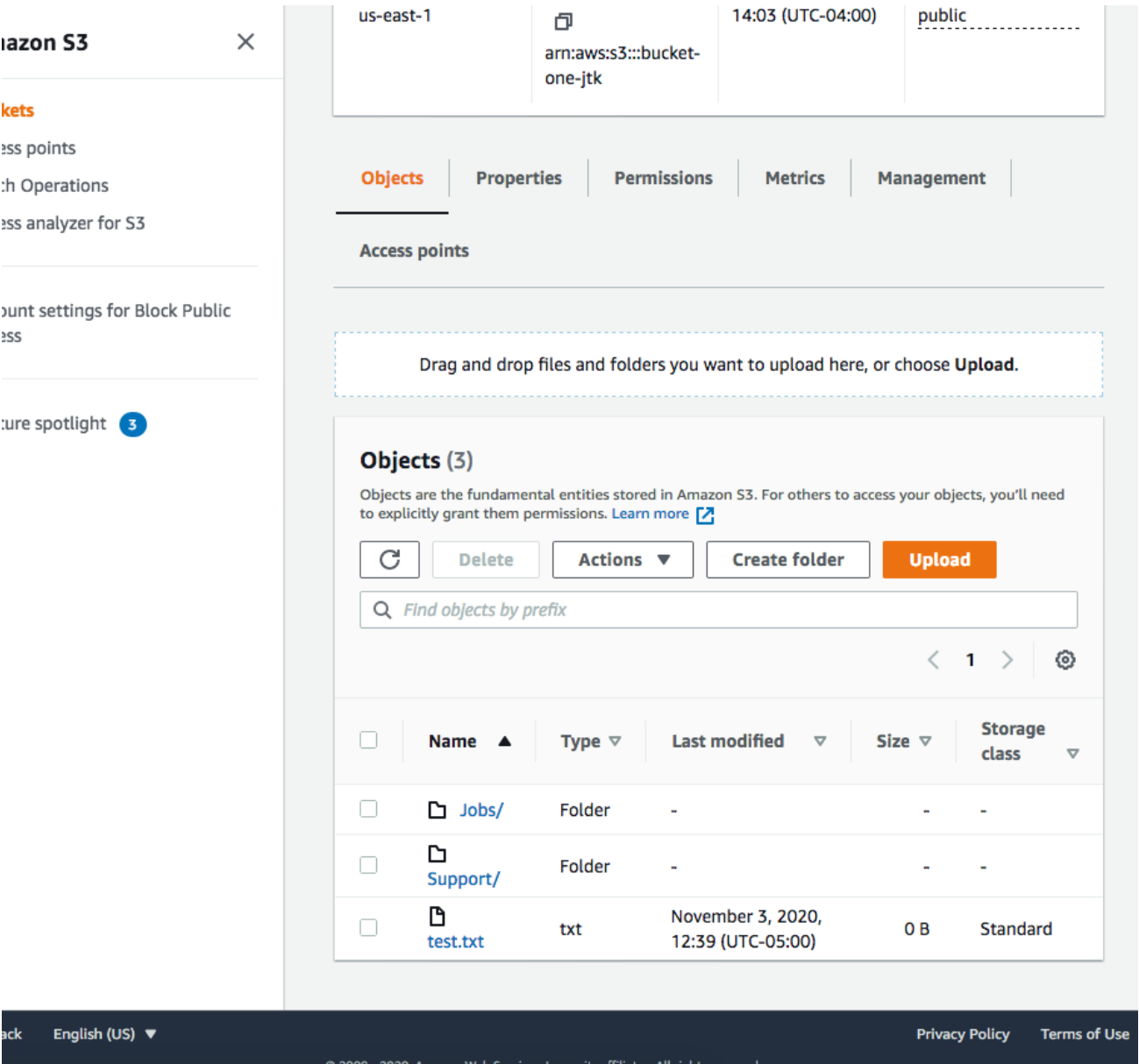
AWS Boto3 Command Line – Homework 1

SDEV 400 Secure Programming in the Cloud

November 1, 2020

Part I

Figures 1a – 1f demonstrate the creation of two AWS S3 buckets, bucket-one-jtk and bucket-two-jtk. Each contains folders “Jobs” and “Support” with two sample files within.



[Figure 1a]

aws

Services

vocstartsoft/user821343=jkaufman6@student.umgc.edu @ 7306-013...

Global

Support

Amazon S3

Buckets

Access points

Batch Operations

Access analyzer for S3

Account settings for Block Public Access

Feature spotlight 3

Jobs/

Folder overview

Region

US East (N. Virginia) us-east-1

S3 URI

s3://bucket-one-jtk/Jobs/

Amazon resource name (ARN)

arn:aws:s3:::bucket-one-jtk/Jobs/

Drag and drop files and folders you want to upload here, or choose Upload.

Objects (2)

Objects are the fundamental entities stored in Amazon S3. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Refresh

Delete



Actions

Create folder

Upload

Find objects by prefix

< 1 >

	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	 Screen Shot 2020-10-31 at 2.13.17 PM.png	png	October 31, 2020, 14:15 (UTC-04:00)	543.4 KB	Standard
<input type="checkbox"/>	 Screen Shot 2020-10-31 at 2.13.34 PM.png	png	October 31, 2020, 14:15 (UTC-04:00)	717.8 KB	Standard

[Figure 1b]

Amazon S3

Buckets

Access points

Batch Operations

Access analyzer for S3

Account settings for Block Public Access

Feature spotlight 3

Amazon S3 > bucket-one-jtk > Support/

Support/

Folder overview

Region US East (N. Virginia) us-east-1	S3 URI s3://bucket-one-jtk/Support/	Amazon resource name (ARN) arn:aws:s3:::bucket-one-jtk/Support/
---	--	--

Drag and drop files and folders you want to upload here, or choose **Upload**.

Objects (2)

Objects are the fundamental entities stored in Amazon S3. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Refresh

Delete

Actions

Create folder

Upload

Find objects by prefix

< 1 > ⚙

<input type="checkbox"/>	Name ▲	Type ▼	Last modified ▼	Size ▼	Storage class ▼
<input type="checkbox"/>	Screen Shot 2020-10-31 at 2.13.17 PM.png	png	October 31, 2020, 14:16 (UTC-04:00)	543.4 KB	Standard
<input type="checkbox"/>	Screen Shot 2020-10-31 at	png	October 31, 2020, 14:16	717.8	Standard

[Figure 1c]

aws

Services

vocstartsoft/user821343=jkaufman6@student.umgc.edu @ 7306-013...

Global

Support

Amazon S3

Buckets

Access points

Batch Operations

Access analyzer for S3

Account settings for Block Public Access

Feature spotlight 3

Region

US East (N. Virginia)

us-east-1

Amazon resource name (ARN)

arn:aws:s3:::bucket-two-jtk

Creation date

October 31, 2020, 14:03 (UTC-04:00)

Access

Objects can be public

Objects

Properties

Permissions

Metrics

Management

Access points

Drag and drop files and folders you want to upload here, or choose **Upload**.

Objects (3)

Objects are the fundamental entities stored in Amazon S3. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Delete

Actions

Create folder

Upload

Find objects by prefix

< 1 >

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	<div><div></div>Jobs/</div>	Folder	-	-	-
<input type="checkbox"/>	<div><div></div>Support/</div>	Folder	-	-	-

[Figure 1d]

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for S3

s for Block Public

it 3

Amazon S3 > bucket-two-jtk > Jobs/

Jobs/

Folder overview

Region	S3 URI	Amazon resource name (ARN)
US East (N. Virginia) us-east-1	s3://bucket-two-jtk/	arn:aws:s3:::bucket-two-jtk/

Drag and drop files and folders you want to upload here, or choose **Upload**.

Objects (2)

Objects are the fundamental entities stored in Amazon S3. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

↺

Delete



Actions ▾

Create folder

Upload

🔍 Find objects by prefix

< 1 > ⚙

<input type="checkbox"/>	Name ▲	Type ▾	Last modified ▾	Size ▾	Storage class ▾
<input type="checkbox"/>	 Screen Shot 2020-10-31 at 2.13.17 PM.png	png	October 31, 2020, 14:16 (UTC-04:00)	543.4 KB	Standard
<input type="checkbox"/>	 Screen Shot 2020-10-31 at	png	October 31, 2020, 14:16	717.8 KB	Standard

[Figure 1e]

Services

Support

Global

7306-013...

user821343=jkaufman6@student.umgc.edu

Support/

Folder overview

Region

US East (N. Virginia) us-east-1

S3 URI

s3://bucket-two-jtk/Support/

Amazon resource name (ARN)

arn:aws:s3:::bucket-two-jtk/Support/

Drag and drop files and folders you want to upload here, or choose **Upload**.

Objects (2)

Objects are the fundamental entities stored in Amazon S3. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Refresh

Delete

Actions

Create folder

Upload

Find objects by prefix

	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	Screen Shot 2020-10-31 at 2.12.42 PM.png	png	October 31, 2020, 14:18 (UTC-04:00)	844.0 KB	Standard
<input type="checkbox"/>	Screen Shot 2020-10-31 at 2.13.02 PM.png	png	October 31, 2020, 14:18 (UTC-04:00)	559.6 KB	Standard

[Figure 1f]

Part II: AWS S3 Command Line interface Operations

1. Entering the program and receiving the initial options shown in Figure 2

```
README.md  venv  week_one
vocstartsoft:~/environment $ cd week_one && source ../venv/bin/activate
(venv) vocstartsoft:~/environment/week_one $ python s_three.py

Find below the s3_client menu options:
1. Create a bucket
2. Add item to a bucket
3. Delete item from a bucket
4. Delete bucket
5. Copy item from one bucket to another
6. Download object from a bucket
7. Exit program

Please enter your selection: █
```

[Figure 2]

2. Figure 3 details creation of a new bucket, testhomework-257204

The screenshot displays the AWS Management Console interface for Amazon S3. On the right, the 'Buckets (5)' page is visible, showing a table of existing buckets. On the left, a terminal window shows the execution of a Python script that interacts with the S3 CLI to create a new bucket.

Amazon S3 Buckets (5)

Name	Region	Access	Creation date
bucket-one-jtk	US East (N. Virginia) us-east-1	Objects can be public	October 31, 2020, 14:03 (UTC-04:00)
bucket-two-jtk	US East (N. Virginia) us-east-1	Objects can be public	October 31, 2020, 14:03 (UTC-04:00)
joykaufman-688991	US East (N. Virginia) us-east-1	Objects can be public	November 1, 2020, 11:42 (UTC-05:00)
joykaufman-701315	US East (N. Virginia) us-east-1	Objects can be public	November 1, 2020, 11:51 (UTC-05:00)
testhomework-257204	US East (N. Virginia) us-east-1	Objects can be public	November 3, 2020, 12:26 (UTC-05:00)

Terminal Output:

```
python -p 172-31-5-98 s3_client.py --bucket testhomework-257204 --region us-east-1
Find below the s3_client menu options:
1. Create a bucket
2. Add item to a bucket
3. Delete item from a bucket
4. Delete bucket
5. Copy item from one bucket to another
6. Download object from a bucket
7. Exit program

Please enter your selection: 1
You have selected the new bucket operation.
To create a new s3_client bucket, we will need your first and last name.

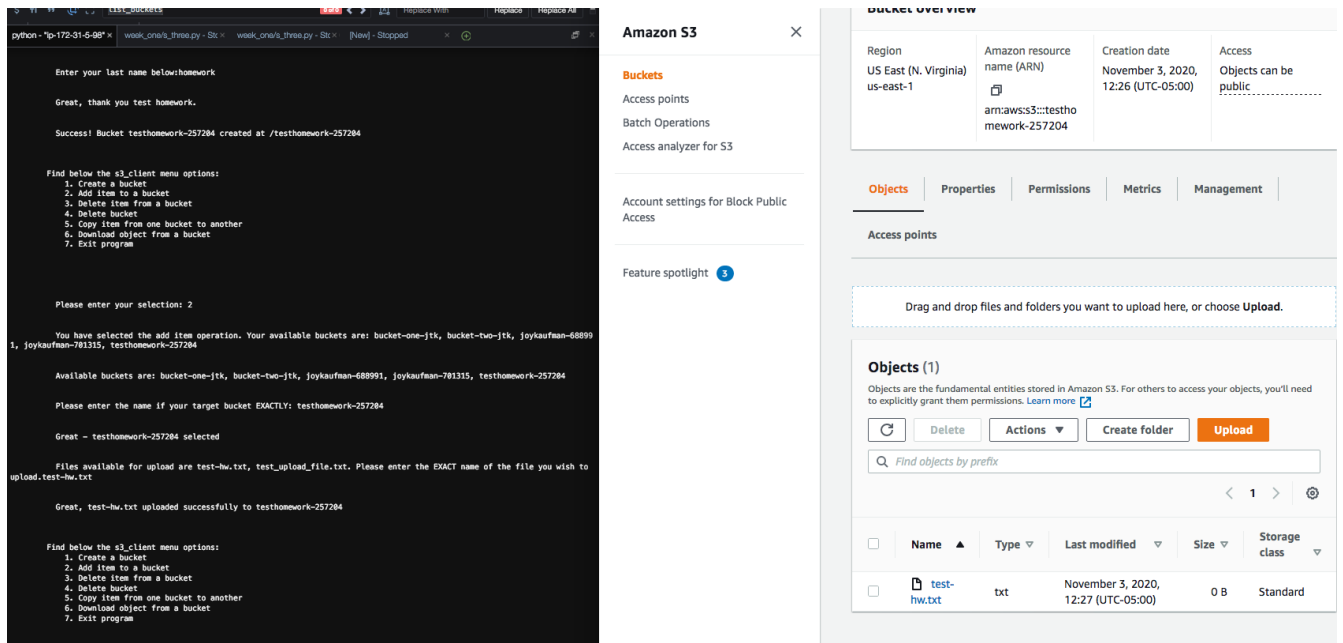
Enter your first name below: test
Enter your last name below: homework
Great, thank you test homework.
Success! Bucket testhomework-257204 created at /testhomework-257204

Find below the s3_client menu options:
1. Create a bucket
2. Add item to a bucket
3. Delete item from a bucket
4. Delete bucket
5. Copy item from one bucket to another
6. Download object from a bucket
7. Exit program

Please enter your selection: █
```

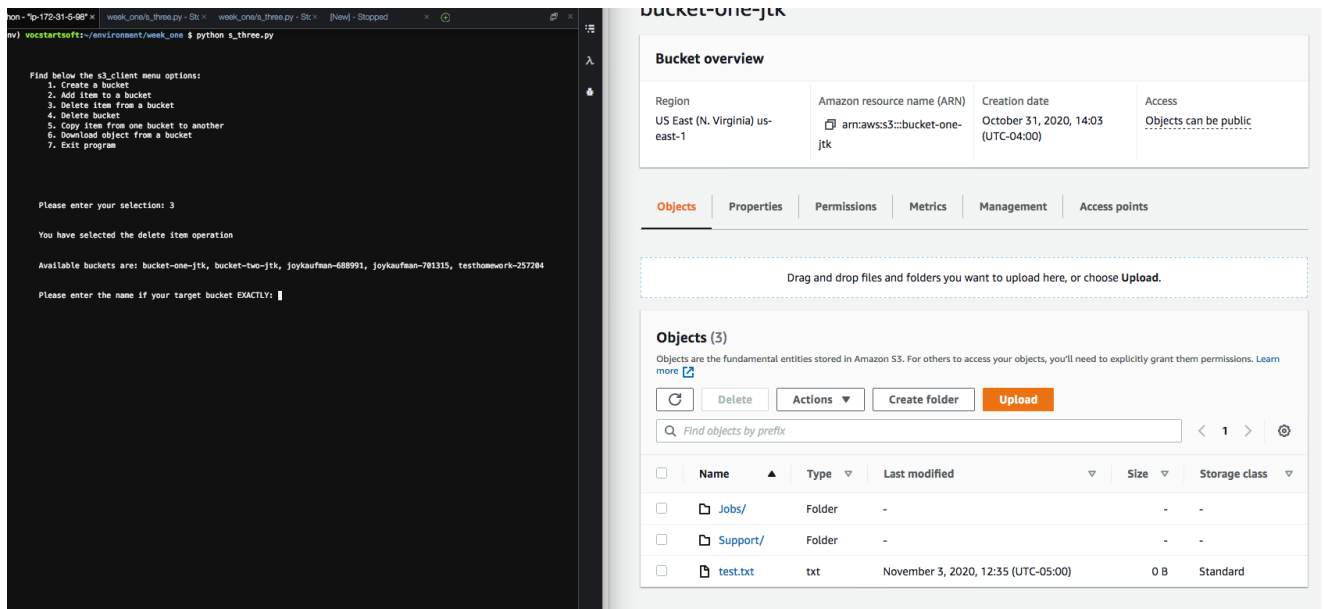
[Figure 3]

3. Figure 4 details adding an item to our new bucket



[Figure 4]

4. Figure 5a and 5b show deletion of a file.



[Figure 5a]

The terminal window on the left shows the execution of a script named `s3_client.py`. The user selects option 3 to delete a bucket. The script prompts for the bucket name, and the user enters `bucket-one-jtk`. The script then prompts for the file name to delete, and the user enters `test.txt`. The script successfully deletes the file and then the bucket.

The AWS Management Console on the right shows the **Amazon S3** service page. The **Objects** tab is selected, showing a list of objects in the bucket `bucket-one-jtk`. The objects are:

Name	Type	Last modified	Size	Storage class
Jobs/	Folder	-	-	-
Support/	Folder	-	-	-

[Figure 5b]

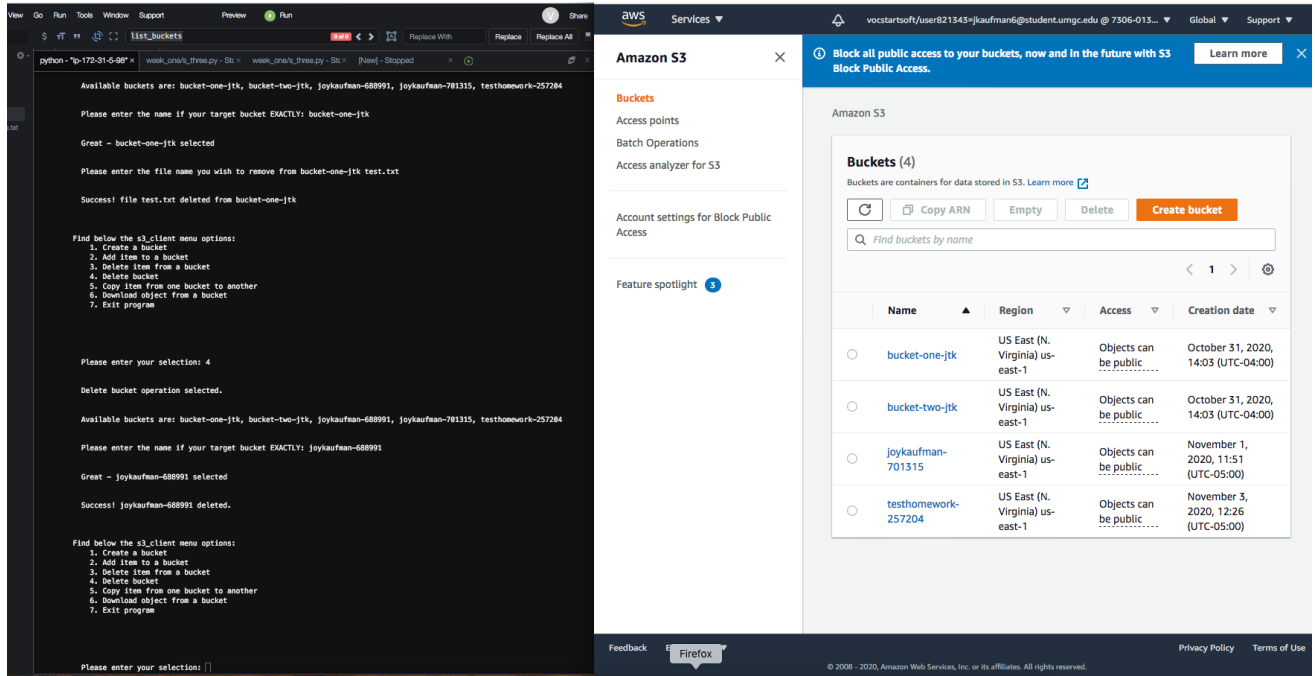
5. Image 6a and 6b detail a successful bucket deletion operation

The terminal window on the left shows the execution of a script named `s3_client.py`. The user selects option 4 to delete a bucket. The script prompts for the bucket name, and the user enters `bucket-one-jtk`. The script then prompts for the file name to delete, and the user enters `test.txt`. The script successfully deletes the file and then the bucket.

The AWS Management Console on the right shows the **Amazon S3** service page. The **Buckets** tab is selected, showing a list of buckets in the account. The buckets are:

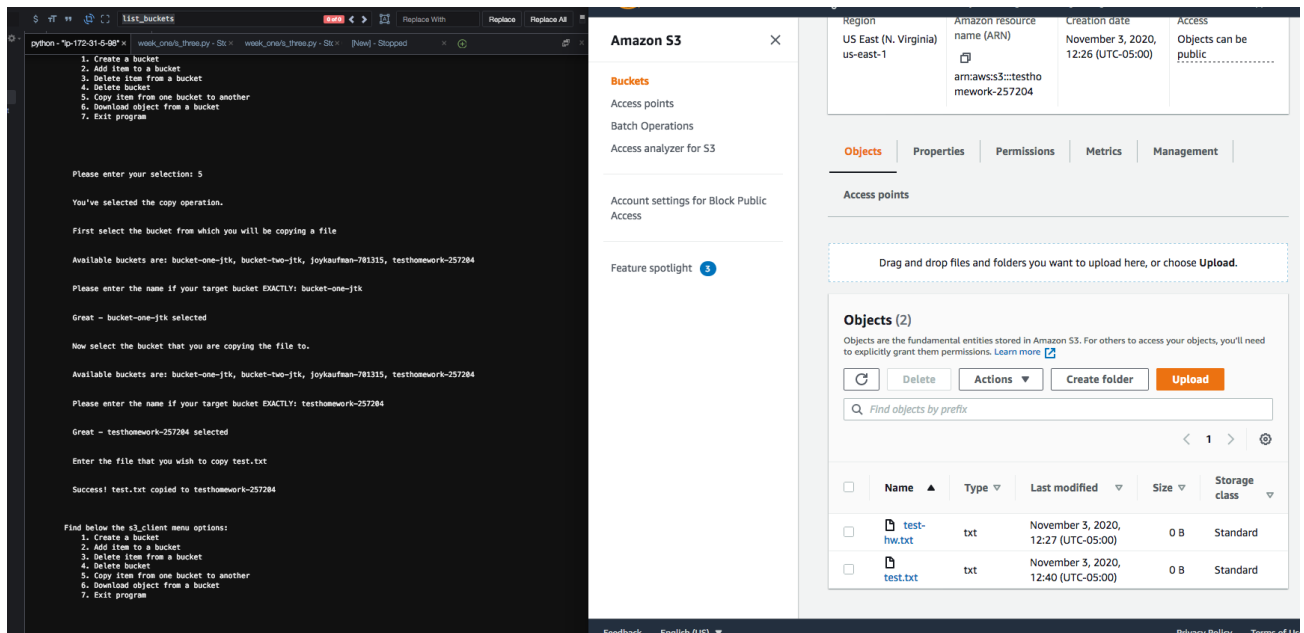
Name	Region	Access	Creation date
bucket-one-jtk	US East (N. Virginia) us-east-1	Objects can be public	October 31, 2020, 14:03 (UTC-04:00)
bucket-two-jtk	US East (N. Virginia) us-east-1	Objects can be public	October 31, 2020, 14:03 (UTC-04:00)
joykaufman-688991	US East (N. Virginia) us-east-1	Objects can be public	November 1, 2020, 11:42 (UTC-05:00)
joykaufman-701315	US East (N. Virginia) us-east-1	Objects can be public	November 1, 2020, 11:51 (UTC-05:00)
testhomework-257204	US East (N. Virginia) us-east-1	Objects can be public	November 3, 2020, 12:26 (UTC-05:00)

[Figure 6a]



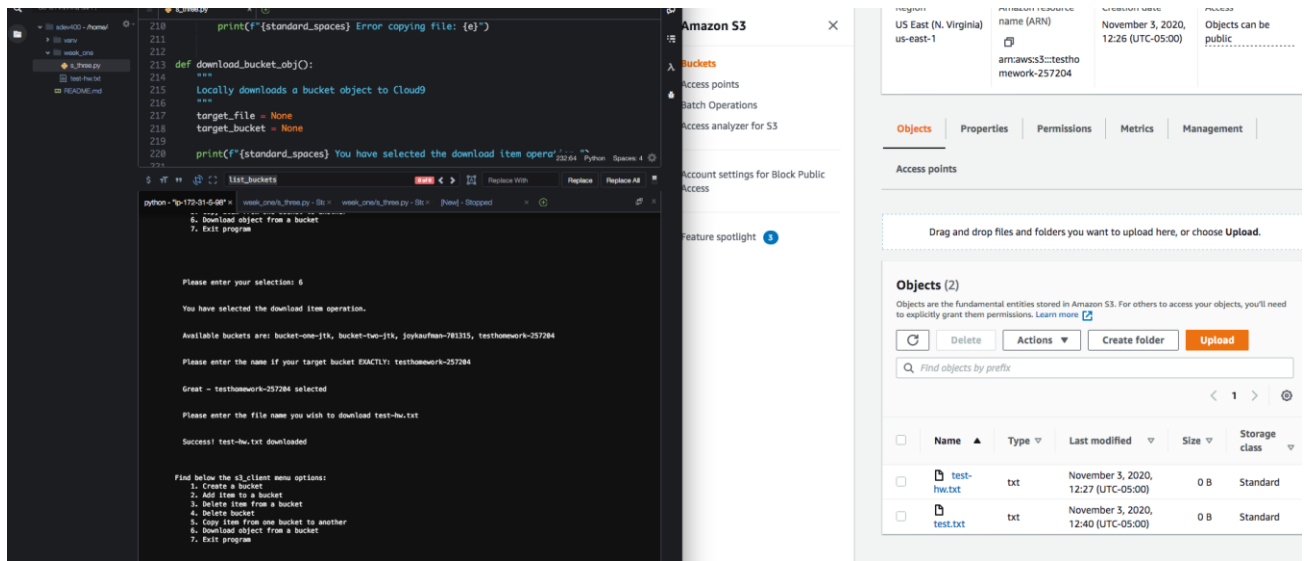
[Figure 6b]

6. Figure 7 shows a successful file copy operation.



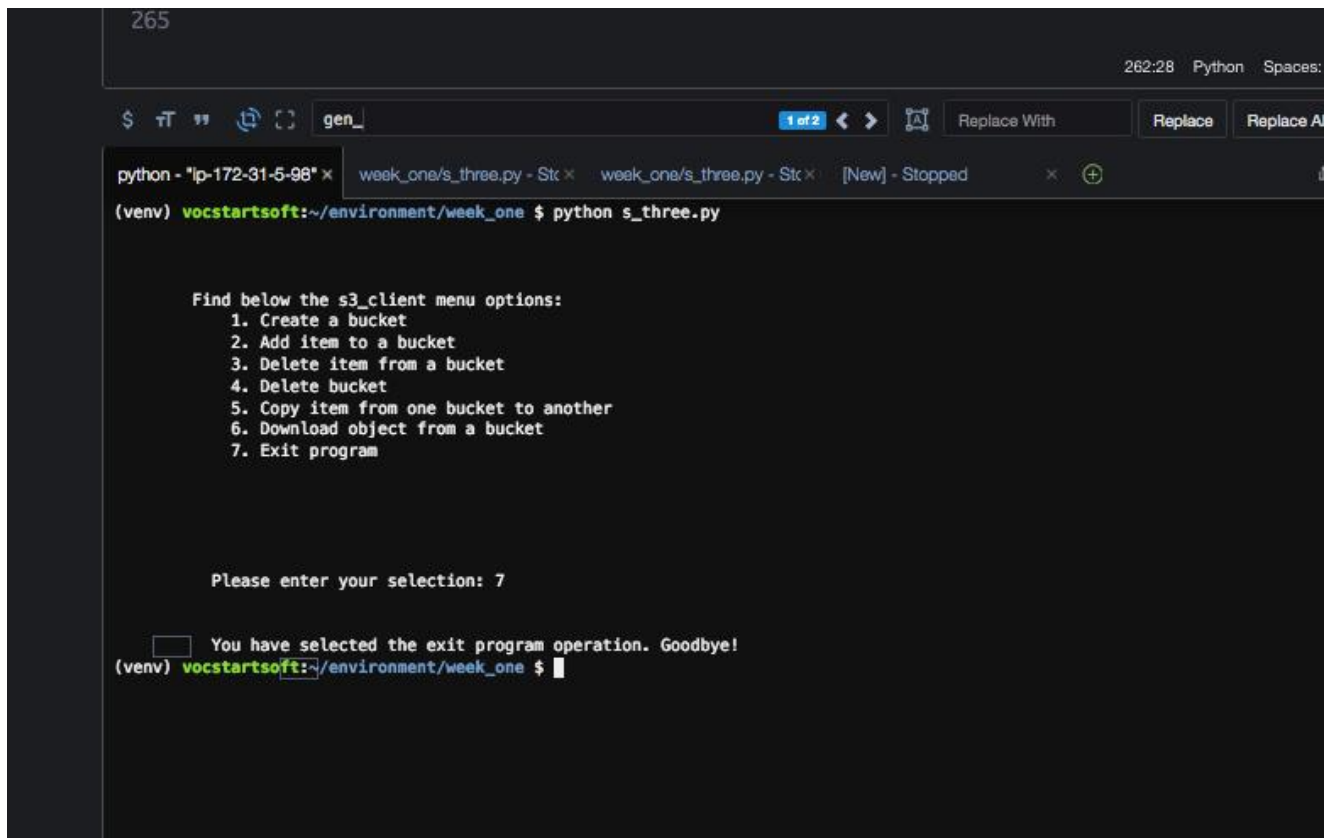
[Figure 7]

7. Figure 8 demonstrates an item from a bucket downloaded to my local Cloud 9 environment



[Figure 8]

8. Figure 9 illustrates exiting the program



[Figure 9]