

## Program Flow and Supported Operations-

### Shell initiation

```
PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (S5)
You are now connected to your S3 storage
S5> █
```

### Copying local file to a valid S3 location –

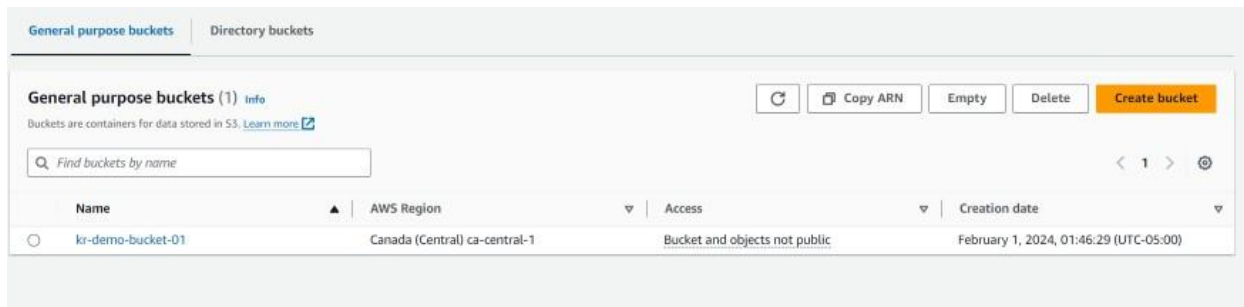
- Using locs3cp command within a bucket or folder, not in root.

```
PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (S5)
You are now connected to your S3 storage
S5> locs3cp photo.jpeg /kr-demo-bucket-01/photo.jpeg
You must first create a bucket or 'chlocn' into an existing one before you can use this command.
S5> █
```

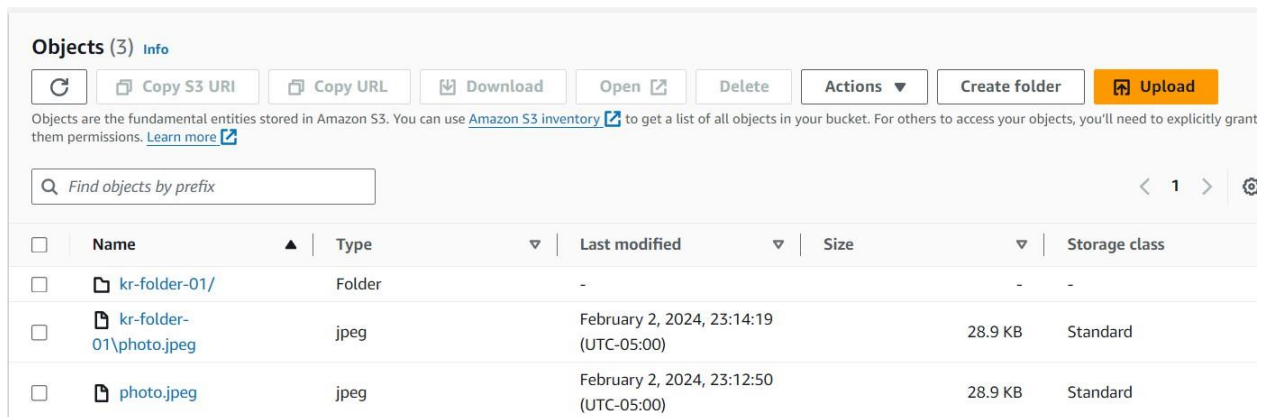
- Chlocn into an existing directory, and then use the locs3cp command

```
PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (S5)
You are now connected to your S3 storage
S5> locs3cp photo.jpeg /kr-demo-bucket-01/photo.jpeg
You must first create a bucket or 'chlocn' into an existing one before you can use this command.
S5> chlocn /kr-demo-bucket-01
S5> cwlocn
/kr-demo-bucket-01
S5> locs3cp photo.jpeg /kr-demo-bucket-01/photo.jpeg
uploaded..
S5> locs3cp photo.jpeg /kr-demo-bucket-01/photo.jpeg
uploaded..
S5> locs3cp photo.jpeg /kr-demo-bucket-01/kr-folder-01/photo.jpeg
uploaded..
S5> █
```

- S3 space before the copy is performed –

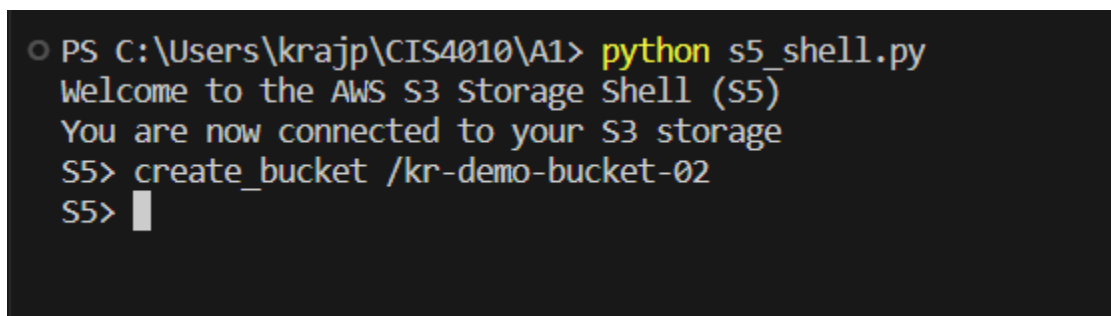


- S3 space before the copy is performed –

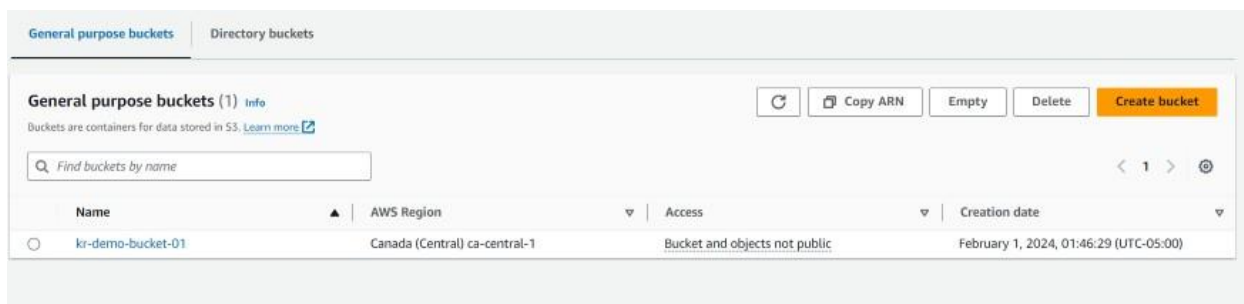


Create Bucket, following naming conventions –

- Command used –



- S3 space before the bucket is created –



- S3 space after the bucket is created –

General purpose buckets (2) <a href="#">Info</a>						Copy ARN	Empty	Delete	Create bucket
Buckets are containers for data stored in S3. <a href="#">Learn more</a>									
<input type="text" value="Find buckets by name"/>					< 1 >				
	Name ▲	AWS Region ▼	Access ▼	Creation date ▼					
<input type="radio"/>	kr-demo-bucket-01	Canada (Central) ca-central-1	<a href="#">Bucket and objects not public</a>	February 1, 2024, 01:46:29 (UTC-05:00)					
<input type="radio"/>	kr-demo-bucket-02	Canada (Central) ca-central-1	<a href="#">Bucket and objects not public</a>	February 2, 2024, 23:16:49 (UTC-05:00)					

- Creating a bucket with invalid name or with a name that already existed –

```

PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (s5)
You are now connected to your S3 storage
S5> create_bucket /kr-demo-bucket-02
S5> create_bucket /test..
Unsuccessful Create Bucket operation - An error occurred (InvalidBucketName) when calling the CreateBucket operation: The specified bucket is not valid.
S5> create_bucket /a1test
Unsuccessful Create Bucket operation - An error occurred (BucketAlreadyExists) when calling the CreateBucket operation: The requested bucket name is not available. The bucket namespace is shared by all users of the system. Please select a different name and try again.
S5>

```

Listing the contents of the specified directories –

```

PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (s5)
You are now connected to your S3 storage
S5> list
kr-demo-bucket-01
kr-demo-bucket-02
S5> list /
kr-demo-bucket-01
kr-demo-bucket-02
S5> chlocn /kr-demo-bucket-01
S5> cwlocn
/kr-demo-bucket-01
S5> list
kr-folder-01  photo.jpeg
S5>

```

- Verifying with S3 space –

General purpose buckets (2) [Info](#)

↻

Copy ARN

Empty

Delete

Create bucket

Buckets are containers for data stored in S3. [Learn more](#)

Find buckets by name

< 1 > ⚙

	Name ▲	AWS Region ▼	Access ▼	Creation date ▼
<input type="radio"/>	kr-demo-bucket-01	Canada (Central) ca-central-1	Bucket and objects not public	February 1, 2024, 01:46:29 (UTC-05:00)
<input type="radio"/>	kr-demo-bucket-02	Canada (Central) ca-central-1	Bucket and objects not public	February 2, 2024, 23:16:49 (UTC-05:00)

Objects (3) [Info](#)

↻

Copy S3 URI

Copy URL

Download

Open

Delete

Actions ▼

Create folder

Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix

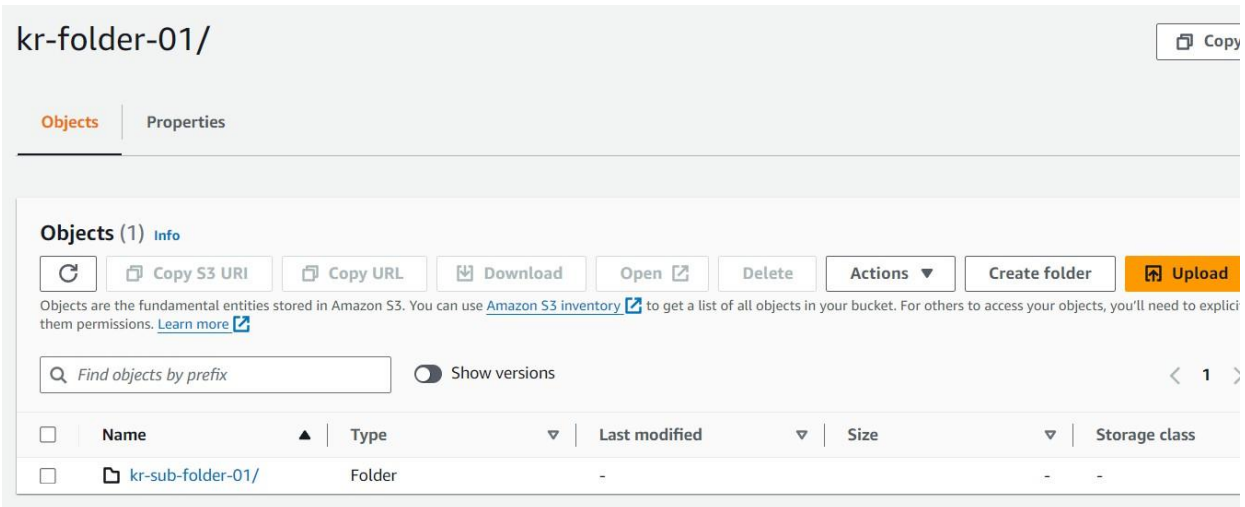
< 1 > ⚙

<input type="checkbox"/>	Name ▲	Type ▼	Last modified ▼	Size ▼	Storage class
<input type="checkbox"/>	kr-folder-01/	Folder	-	-	-
<input type="checkbox"/>	kr-folder-01\photo.jpeg	jpeg	February 2, 2024, 23:14:19 (UTC-05:00)	28.9 KB	Standard
<input type="checkbox"/>	photo.jpeg	jpeg	February 2, 2024, 23:12:50 (UTC-05:00)	28.9 KB	Standard

```

PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (S5)
You are now connected to your S3 storage
S5> chlocn /kr-demo-bucket-01/kr-folder-01
S5> cwlocn
/kr-demo-bucket-01/kr-folder-01
S5> list
kr-sub-folder-01
S5>

```



Chlocn, Cwlocn, and Quit/Exit commands –

- Error checking in place to not allow the user to enter bucket name without leading '/' – indicating the root

```

PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (S5)
You are now connected to your S3 storage
S5> list
kr-demo-bucket-01
kr-demo-bucket-02
S5> chlocn kr-demo-bucket-01
Incorrect input format. Verify with expected format - "chlocn <bucket_name or full/relative pathname of new directory>"
S5> chlocn /kr-demo-bucket-01
S5> cwlocn
/kr-demo-bucket-01
S5> quit
Exiting AWS S3 Storage Shell (S5)...
PS C:\Users\krajp\CIS4010\A1>

```

Help command for user

```

PS C:\Users\krajp\CIS4010\A1> python s5_shell.py
Welcome to the AWS S3 Storage Shell (S5)
You are now connected to your S3 storage
S5> help
Welcome to AWS S3 Storage Shell (S5) help.
Shell commands -

locs3cp: copy a local file to a S3 location.
format: 'locs3cp <full or relative pathname of local object> /<bucket_name>/<full or relative pathname of the S3 object> '

create_bucket: create a bucket in the S3 space following naming conventions.
format: 'create_bucket /<bucket_name>'

cwlocn: Display the current working directory.
format: 'cwlocn'

list: List all contents of the current directory.
format: 'list' or 'list /' or 'list <full or relative pathname>'

chlocn: change the current working dorectory in the S3 space.
format: 'chlocn /<bucket_name>' or 'chlocn <full or relative pathname>'

quit/exit: Exit the AWS S3 Storage Shell (S5).
format: 'quit' or 'exit'
S5>

```

