Date: 2/19/2022

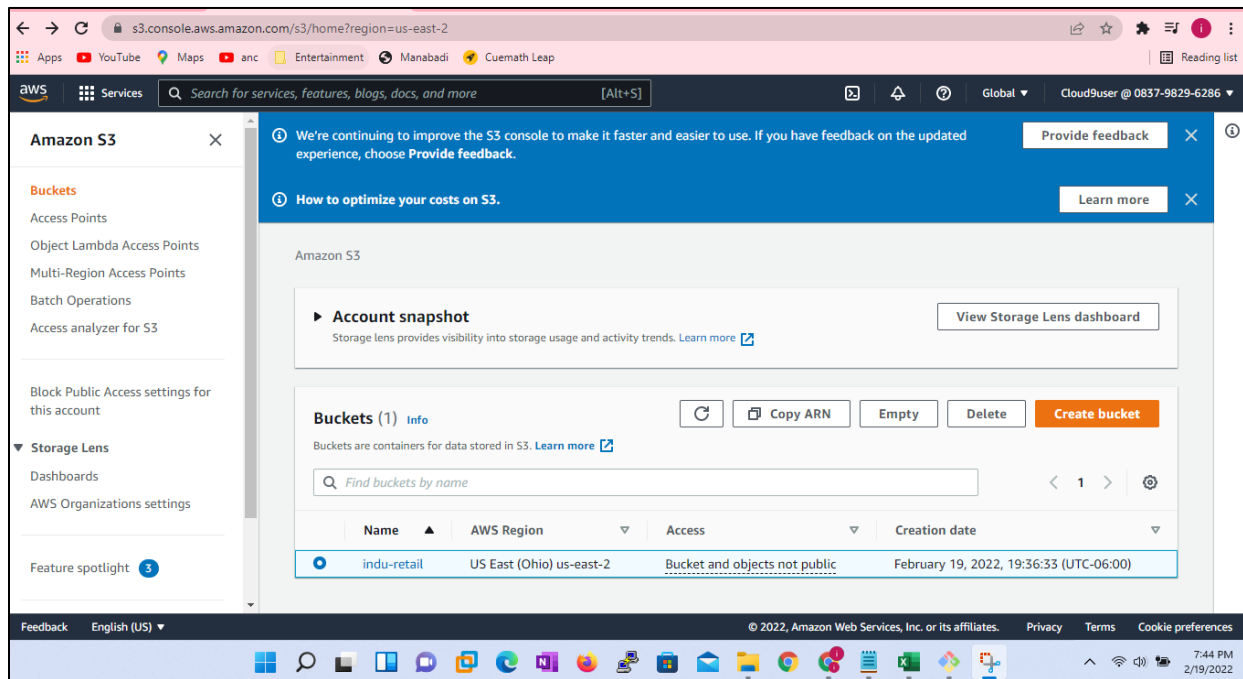**Storage- About S3(Simple Storage Service)**

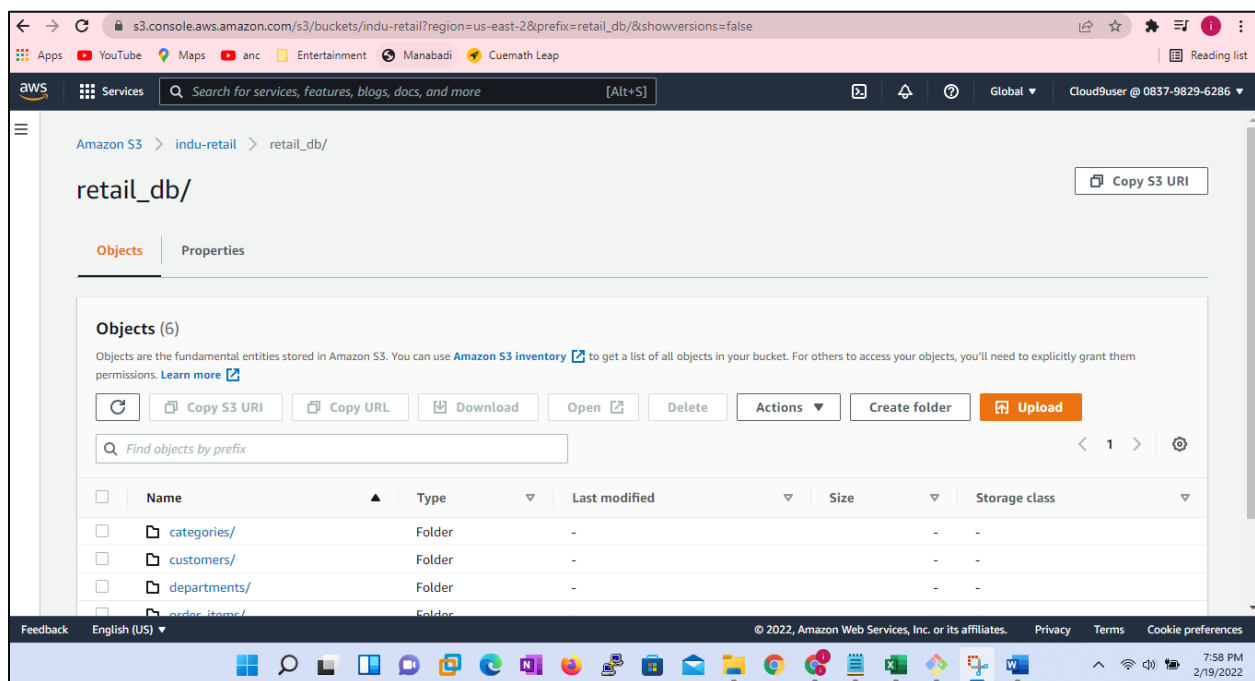Figure 1Created bucket with name indu-retail

Figure 2Added folders/files as objects into bucket

Version Control in s3

Once versioning is enabled we can go to Management and add Life cycle rules. We will add a basic life cycle rule to delete previous versions older than 3 days.

- Click on Management then click on **Create Lifecycle Rule**.
- Name: **Archive Old Retail Files**

Enabling the version control

Cross Region Replication:

First we created the new bucket as a copy of first bucket in different region
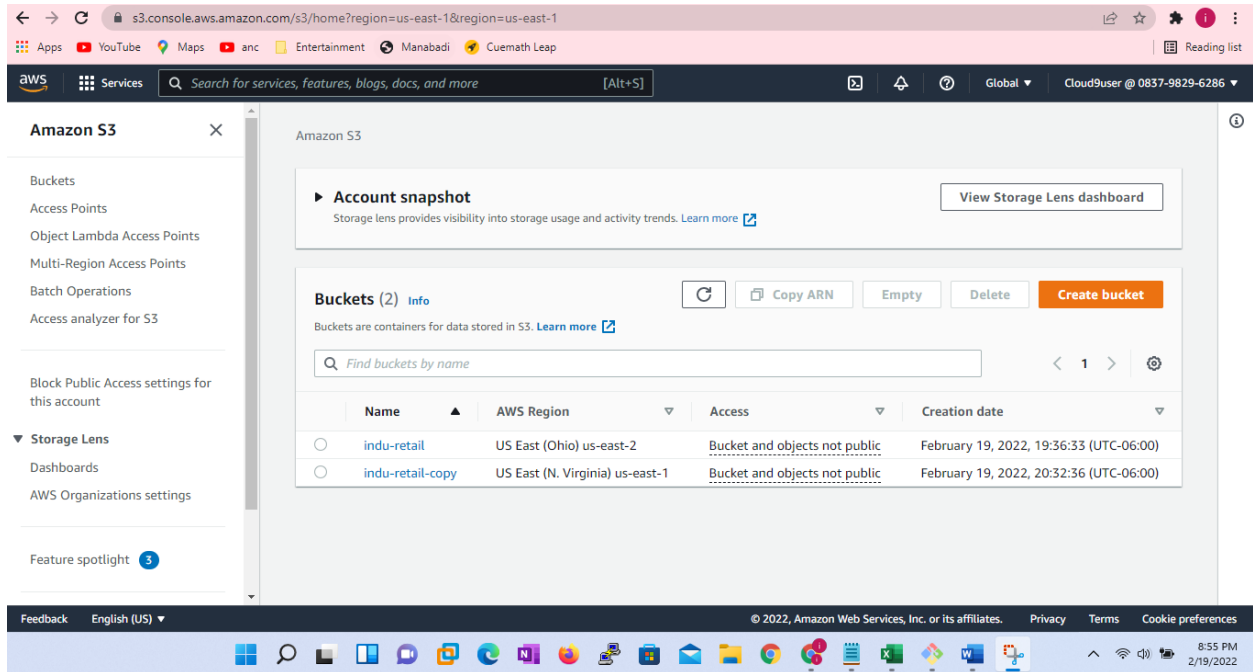
- Create a role by the name **AWSS3FullAccessRole** with **AmazonS3FullAccess** policy.
- Go to the bucket (**indu-retail** in my case).
- Click on Management and go to **Replication rules**.
- Click on **Create replication rule**.
- Replication rule name: **Retail replication**
- Status: **Enabled**
- Choose a Rule Scope: Choose to **Limit the scope of this rule using one or more filters**
- Prefix: **retail_db** (all objects under retail_db will be replicated)
- Enter bucket name: **indu-retail-copy**
- Make sure to enable versioning on the destination bucket.
- Make sure to choose AWSS3FullAccessRole and click on Save.
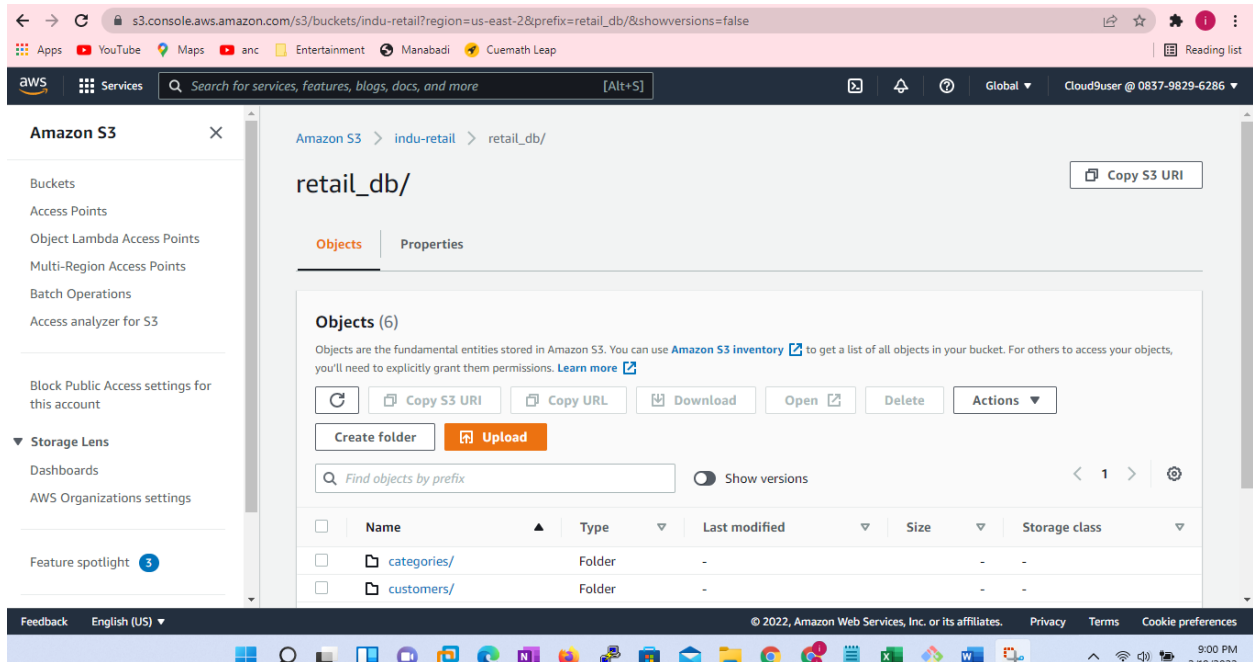
Objects are replicated into the copy of the bucket in different AWS region
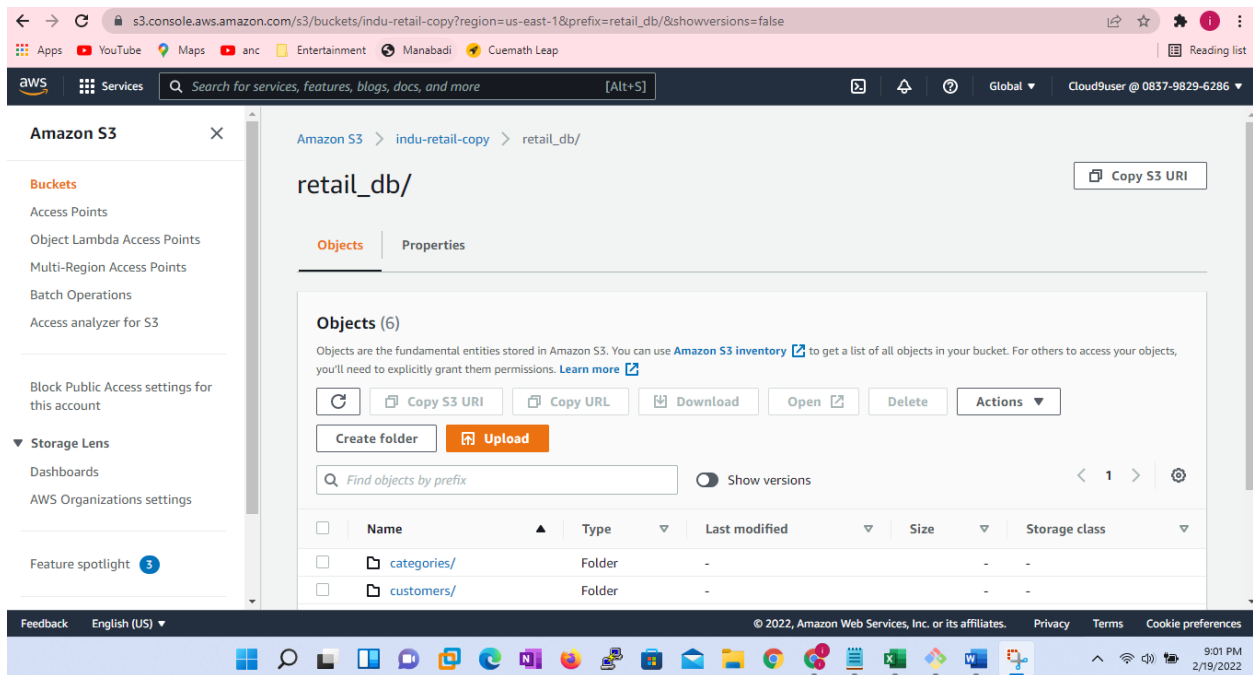
S3 Storage Classes:

- We can edit the storage class at the level of an object or folder. It is available under **Actions**.
- We can configure the storage class as part of the **Replication Rule**. It is useful when you are using replication for low-cost backup.
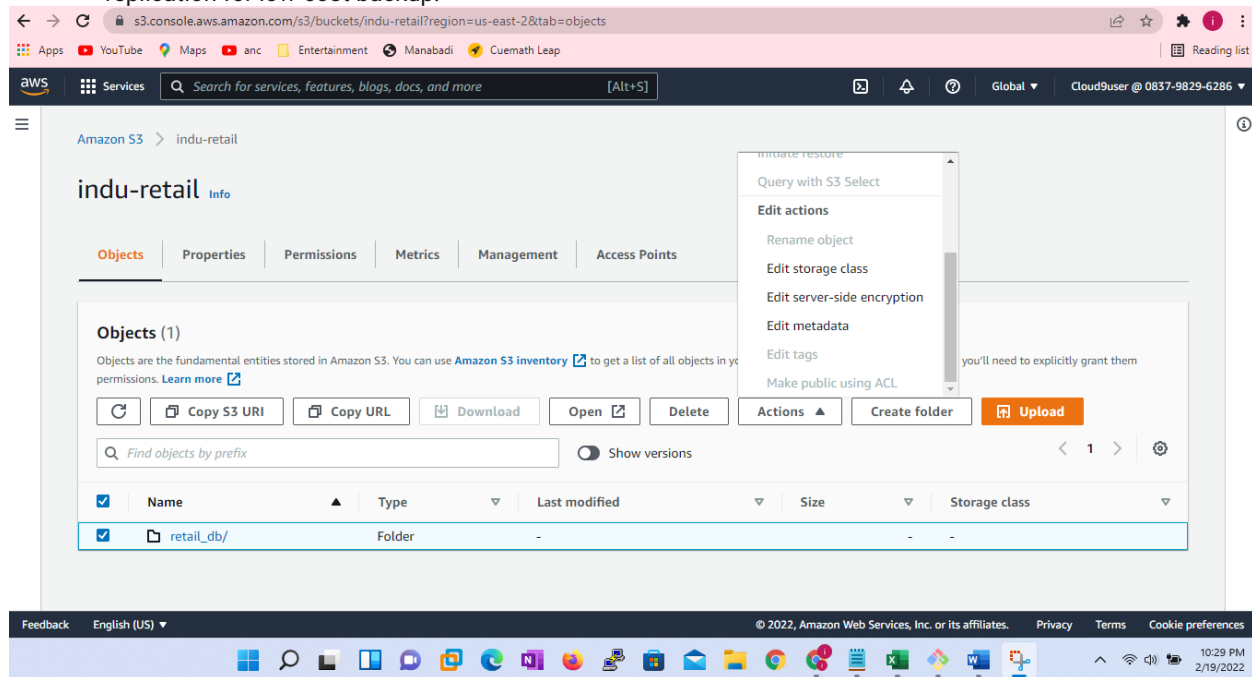
We can configure the storage class as part of the **Replication Rule**. It is useful when you are using replication for low-cost backup.

- Click on edit for replication rule.
- At the destination, change the storage class.
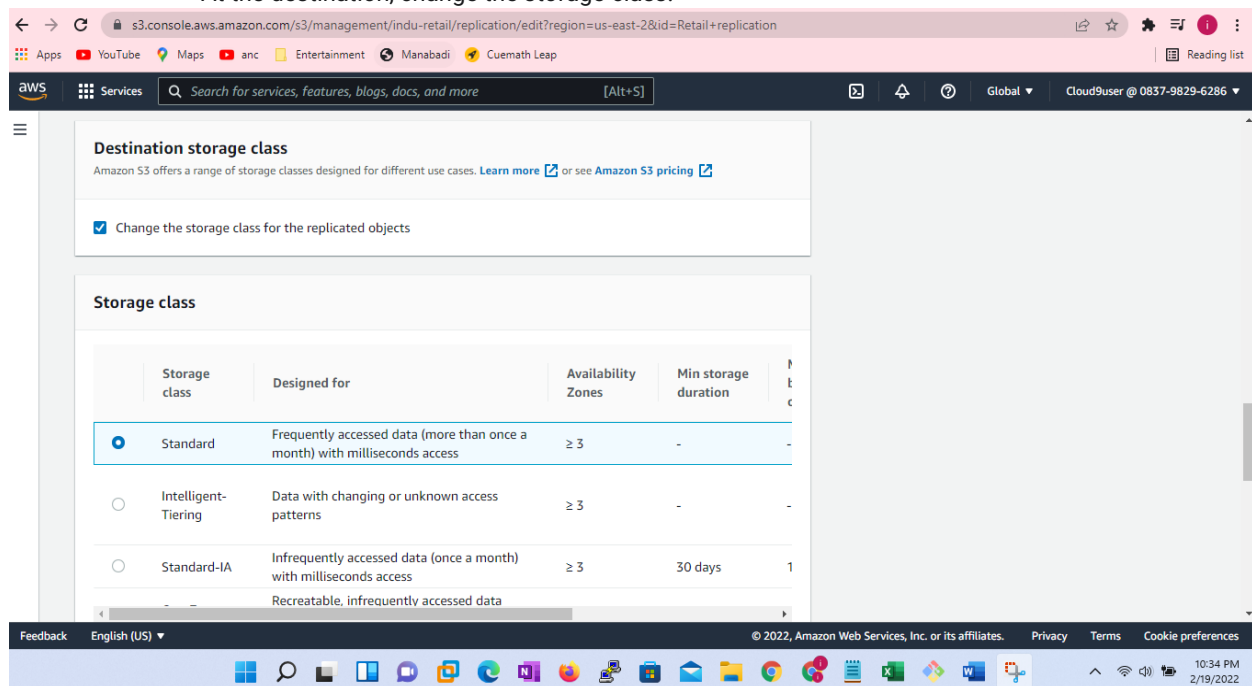
We can also configure the storage class as part of the Life Cycle. Update lifecycle rule **Archive Old Retail Files** as follows.
Change the storage class of noncurrent versions to Glacier with 0 days.
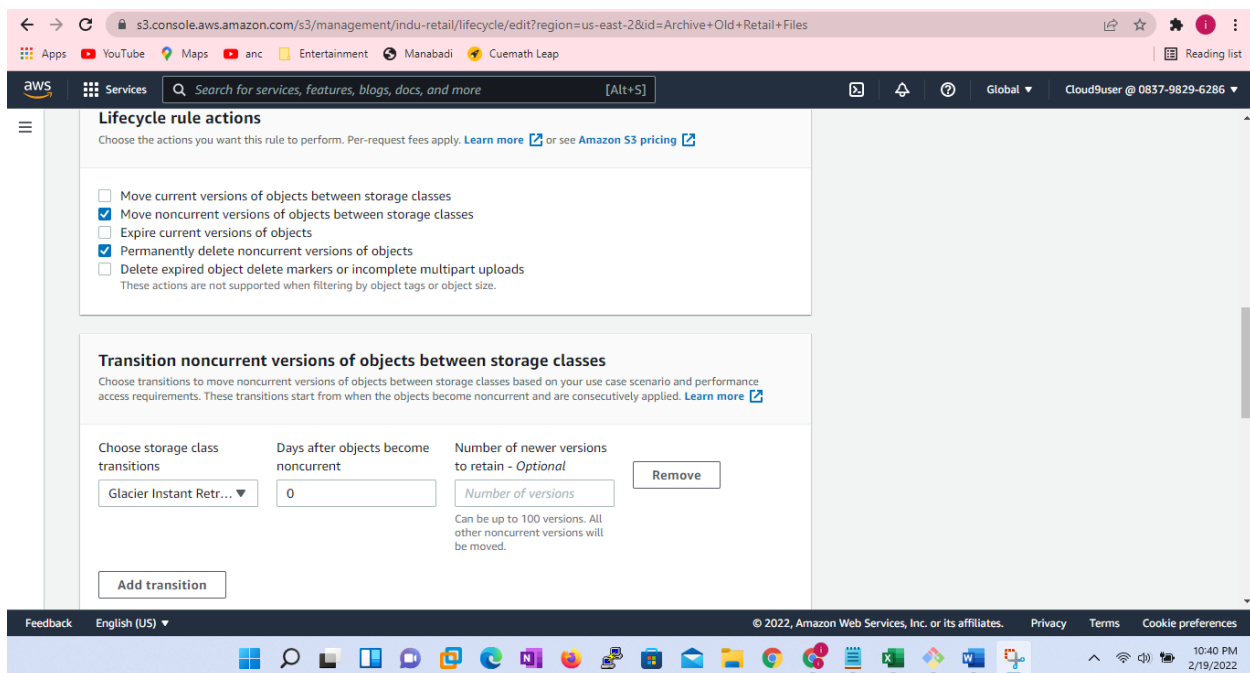
Managing Objects in S3 using CLI - Lab

Copy all the folders along with files in the retail_db folder from the local file system to s3. Make sure to copy these folders along with the files in them


```
Command Prompt                                                                                    —  □  ×
C:\>aws configure
AWS Access Key ID [****************ANX6]: AKIARHAWEQ3PCD5SANX6
AWS Secret Access Key [****************d/na]: 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
Default region name [us east]: us-east-2
Default output format [None]:

C:\>aws s3 ls s3://indu-retail
                           PRE retail_db/

C:\>aws s3 ls s3://indu-retail --recursive
2022-02-19 19:38:54          0 retail_db/
2022-02-19 20:52:56       1087 retail_db/categories/part-00000
2022-02-19 20:52:57     966154 retail_db/customers/part-00000
2022-02-19 20:52:57         66 retail_db/departments/part-00000
2022-02-19 20:53:00    5581078 retail_db/order_items/part-00000
2022-02-19 20:53:03    3068827 retail_db/orders/part-00000
2022-02-19 20:53:03     175500 retail_db/products/part-00000

C:\>aws s3 ls s3://indu-retail --summarize
                           PRE retail_db/

Total Objects: 0
   Total Size: 0

C:\>aws s3 ls s3://indu-retail/retail_db --summarize
                           PRE retail_db/

Total Objects: 0
   Total Size: 0

C:\>aws s3 ls s3://indu-retail/retail_db --summarize  --recursive
2022-02-19 19:38:54          0 retail_db/
2022-02-19 20:52:56       1087 retail_db/categories/part-00000
2022-02-19 20:52:57     966154 retail_db/customers/part-00000
2022-02-19 20:52:57         66 retail_db/departments/part-00000
2022-02-19 20:53:00    5581078 retail_db/order_items/part-00000
2022-02-19 20:53:03    3068827 retail_db/orders/part-00000
2022-02-19 20:53:03     175500 retail_db/products/part-00000

Total Objects: 7
   Total Size: 9792712

C:\>aws s3 ls s3://indu-retail/retail_db --summarize  --recursive --human-readable
```
12:33 AM
2/20/2022

```
C:\>aws s3 ls s3://indu-retail/retail_db --summarize  --recursive --human-readable
2022-02-19 19:38:54     0 Bytes retail_db/
2022-02-19 20:52:56     1.1 KiB retail_db/categories/part-00000
2022-02-19 20:52:57   943.5 KiB retail_db/customers/part-00000
2022-02-19 20:52:57    66 Bytes retail_db/departments/part-00000
2022-02-19 20:53:00     5.3 MiB retail_db/order_items/part-00000
2022-02-19 20:53:03     2.9 MiB retail_db/orders/part-00000
2022-02-19 20:53:03   171.4 KiB retail_db/products/part-00000

Total Objects: 7
   Total Size: 9.3 MiB
```

```
C:\>aws s3 rm s3://indu-retail/retail_db
delete: s3://indu-retail/retail_db

C:\>aws s3 cp development/practice/retail_db/departments s3://indu-retail/retail_db/departments/ --recursive
upload: development\practice\retail_db\departments\part-00000 to s3://indu-retail/retail_db/departments/part-00000

C:\>aws s3 cp development/practice/retail_db/categories s3://indu-retail/retail_db/categories/ --recursive
upload: development\practice\retail_db\categories\part-00000 to s3://indu-retail/retail_db/categories/part-00000

C:\>aws s3 cp development/practice/retail_db/products s3://indu-retail/retail_db/products/ --recursive
upload: development\practice\retail_db\products\part-00000 to s3://indu-retail/retail_db/products/part-00000

C:\>aws s3 cp development/practice/retail_db/orders s3://indu-retail/retail_db/orders/ --recursive
upload: development\practice\retail_db\orders\part-00000 to s3://indu-retail/retail_db/orders/part-00000

C:\>aws s3 cp development/practice/retail_db/customers s3://indu-retail/retail_db/customers/ --recursive
upload: development\practice\retail_db\customers\part-00000 to s3://indu-retail/retail_db/customers/part-00000

C:\>aws s3 ls indu-retail --recursive
2022-02-20 00:22:27        1087 retail_db/categories/part-00000
2022-02-20 00:24:09      966154 retail_db/customers/part-00000
2022-02-20 00:20:57          66 retail_db/departments/part-00000
2022-02-20 00:23:30     3068827 retail_db/orders/part-00000
2022-02-20 00:18:48          66 retail_db/part-00000
2022-02-20 00:23:00      175500 retail_db/products/part-00000
```