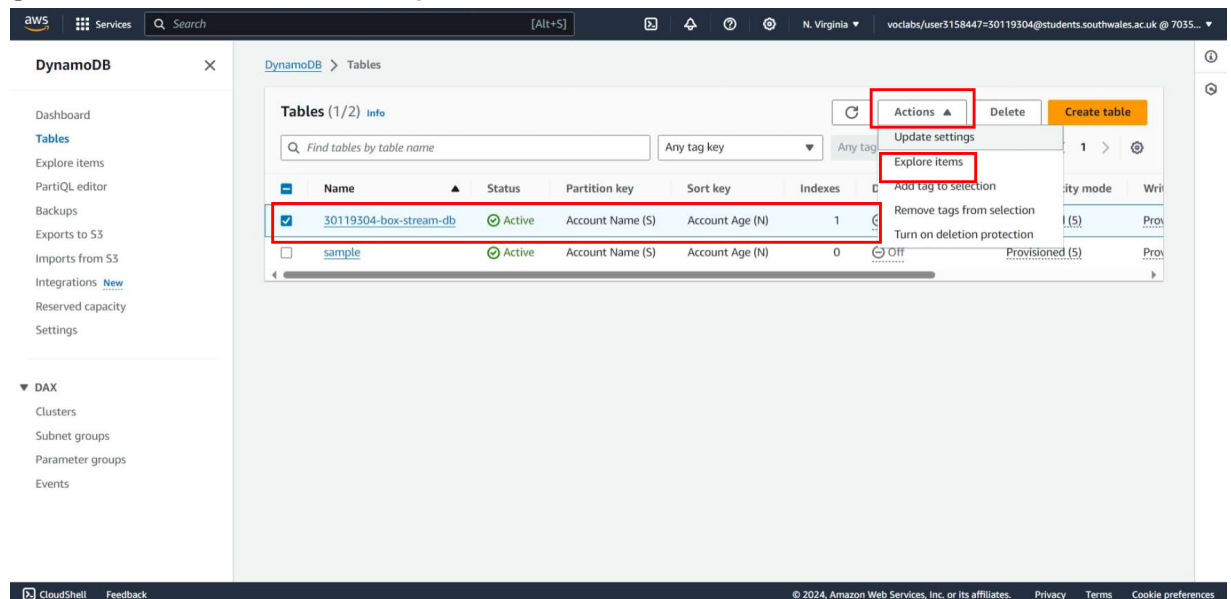


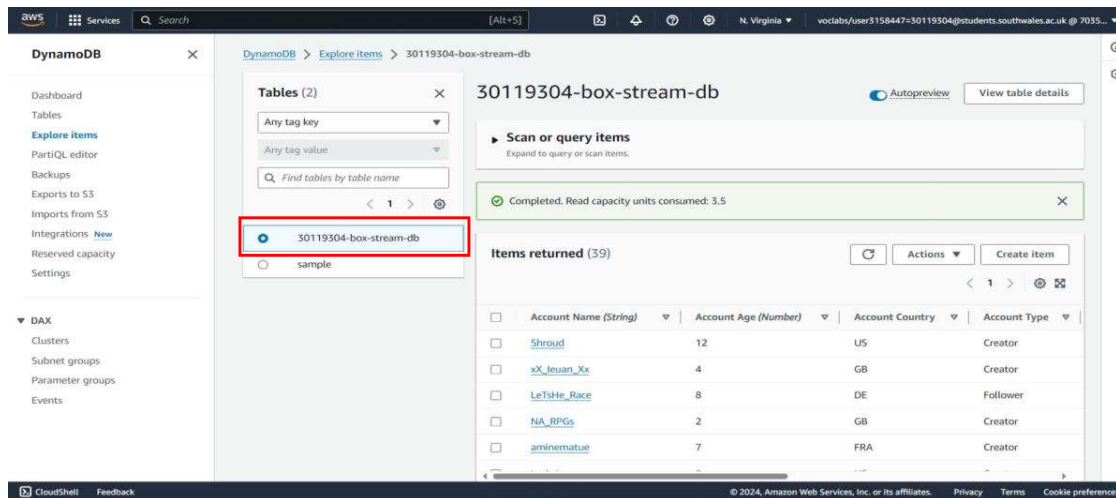
TASK B: QUERY VALIDATION

In the previous task we stored JSON data on an S3 bucket named 30119304-box-stream-bucket and generated a DynamoDB Table using the data stored on the S3 Bucket. It is now necessary to download the CSV file for every query result and upload it to your S3 bucket using the naming convention {student number}query{question number}.CSV

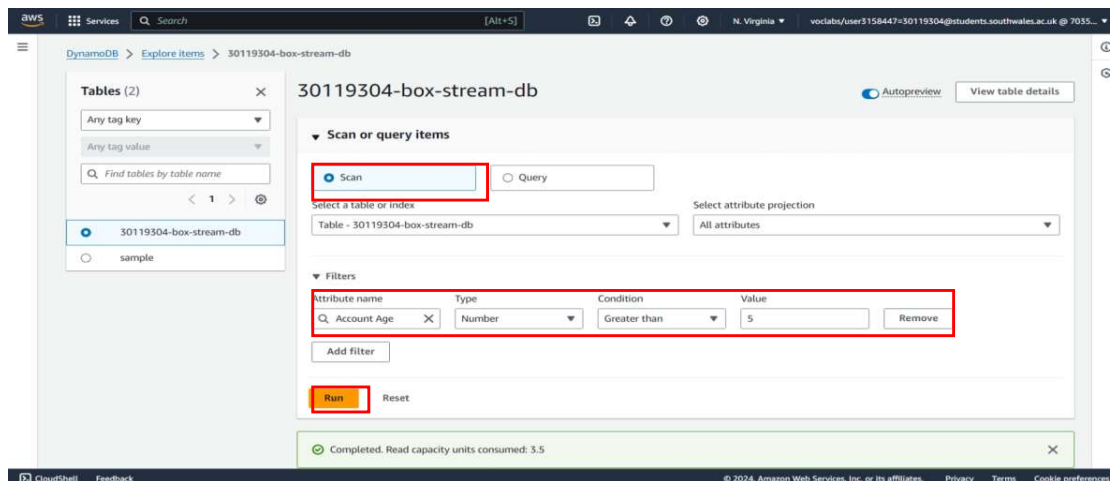
1. Go to the AWS (Amazon Web Services) Management Console and sign in to your AWS account.
2. Check that the **N. Virginia (us-east-1)** region's resources are currently being managed by your EC2 console. Checking the drop-down option to the left of your username at the top of the screen will allow you to confirm this. Before moving on to the following stage, select the N. Virginia region from the region selection if it is not already shown.
3. navigate to the DynamoDB service by clicking on **"Services"** in the top left corner, then selecting **"DynamoDB"** under the Database section or you can search in the search bar.
4. Click on the **"tables"** in the left corner and select **"30119304-box-stream-db"** then go to **"Action"** click on the **"Explore item"**



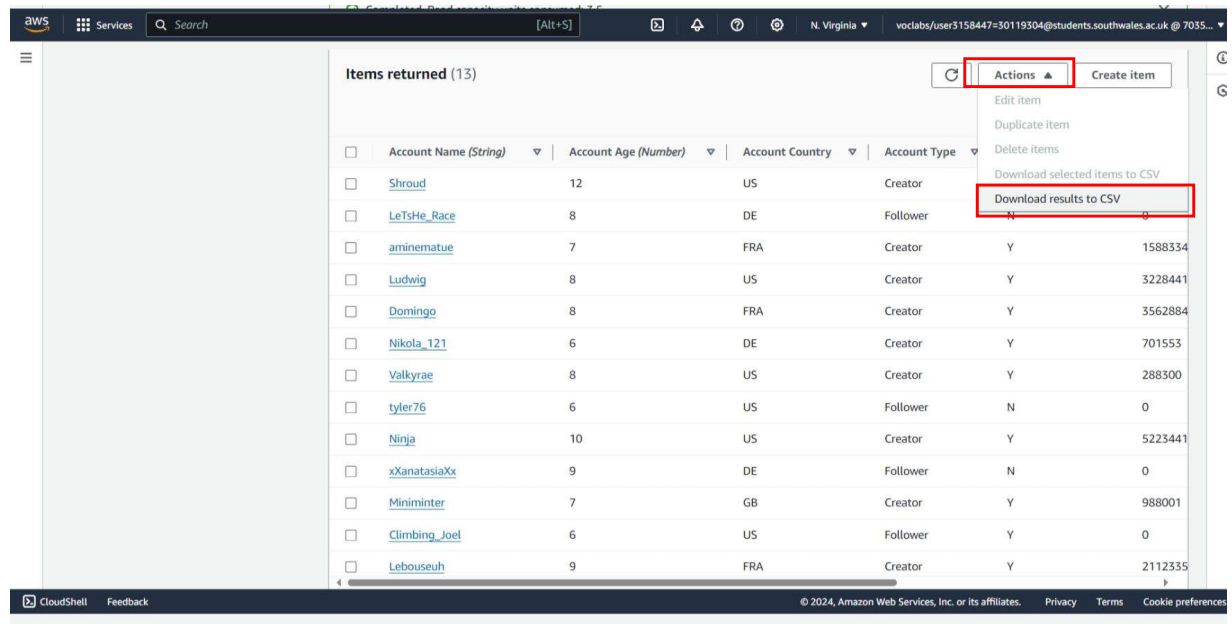
5. Now we are going to write Scan/query for the following conditions:
Note: Make sure that you selected **30119304-box-stream-db** table.



- Return all data for accounts that are older than 5 years.
- Follow the logic below and click on the “Run” button.



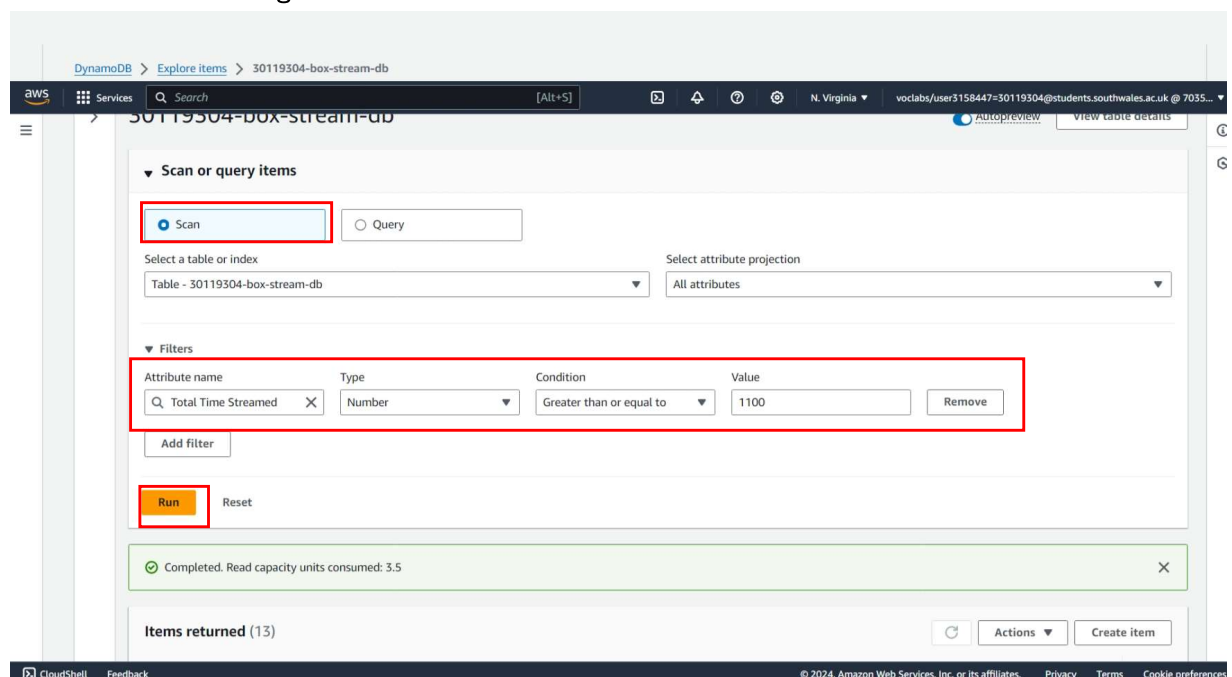
- We got the result now go to “Action” select “Download result to CSV” and rename it has 30119304query1 in your local system.



The screenshot shows the AWS IAM console with a list of 13 users. The 'Actions' menu is open, and 'Download results to CSV' is highlighted. The table below shows the details of the users.

Account Name (String)	Account Age (Number)	Account Country	Account Type	Account Status	Account Creation Date	Account Last Modified Date
Shroud	12	US	Creator	Y	1588334	3228441
LeTsHe_Race	8	DE	Follower	N	0	0
aminematue	7	FRA	Creator	Y	1588334	3228441
Ludwig	8	US	Creator	Y	1588334	3228441
Domingo	8	FRA	Creator	Y	1588334	3228441
Nikola_121	6	DE	Creator	Y	1588334	3228441
Valkyrie	8	US	Creator	Y	1588334	3228441
tyler76	6	US	Follower	N	0	0
Ninja	10	US	Creator	Y	1588334	3228441
xXanatasiaXx	9	DE	Follower	N	0	0
Miniminter	7	GB	Creator	Y	1588334	3228441
Climbing_Joel	6	US	Follower	Y	0	0
Lebouseuh	9	FRA	Creator	Y	1588334	3228441

- Return only the account names for accounts that have streamed for at least 1100 hours or more.
- Follow the logic below and click on the **“Run”** button.



The screenshot shows the AWS IAM console 'Scan or query items' interface. The 'Scan' button is highlighted, and a filter is applied to 'Total Time Streamed' greater than or equal to 1100. The 'Run' button is also highlighted. The table below shows the details of the users.

Account Name (String)	Account Age (Number)	Account Country	Account Type	Account Status	Account Creation Date	Account Last Modified Date
Shroud	12	US	Creator	Y	1588334	3228441
LeTsHe_Race	8	DE	Follower	N	0	0
aminematue	7	FRA	Creator	Y	1588334	3228441
Ludwig	8	US	Creator	Y	1588334	3228441
Domingo	8	FRA	Creator	Y	1588334	3228441
Nikola_121	6	DE	Creator	Y	1588334	3228441
Valkyrie	8	US	Creator	Y	1588334	3228441
tyler76	6	US	Follower	N	0	0
Ninja	10	US	Creator	Y	1588334	3228441
xXanatasiaXx	9	DE	Follower	N	0	0
Miniminter	7	GB	Creator	Y	1588334	3228441
Climbing_Joel	6	US	Follower	Y	0	0
Lebouseuh	9	FRA	Creator	Y	1588334	3228441

- We got the result now go to **“Action”** select **“Download result to CSV”** and rename it has 30119304query2 in your local system.

Completed. Read capacity units consumed: 3.5

Items returned (9)

	Account Name (String)	Account Age (Number)	Account Country	Account Type	Premium Mem...	Total	
<input type="checkbox"/>	Shroud	12	US	Creator	Y	35600	
<input type="checkbox"/>	aminematue	7	FRA	Creator	Y	15883	1480
<input type="checkbox"/>	Ludwig	8	US	Creator	Y	3228441	1997
<input type="checkbox"/>	Domingo	8	FRA	Creator	Y	3562884	1870
<input type="checkbox"/>	Nikola_121	6	DE	Creator	Y	701553	1411
<input type="checkbox"/>	Valkyrae	8	US	Creator	Y	288300	1100
<input type="checkbox"/>	Ninja	10	US	Creator	Y	5223441	2870
<input type="checkbox"/>	Miniminter	7	GB	Creator	Y	988001	1230
<input type="checkbox"/>	Lebouseuh	9	FRA	Creator	Y	2112335	1550

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- Return all data for accounts which are the follower type and have watched more than 980 hours on the platform.
- Follow the logic below and click on the **“Run”** button.

30119304-box-stream-db

Autopreview View table details

▼ Scan or query items

☒ Scan ☐ Query

Select a table or index: Table - 30119304-box-stream-db

Select attribute projection: All attributes

▼ Filters

Attribute name	Type	Condition	Value	
<input type="text" value="Account Type"/>	String	Equal to	Follower	Remove
<input type="text" value="Total Time Watched"/>	Number	Greater than	980	Remove

Add filter

Reset

Completed. Read capacity units consumed: 3.5

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- We got the result now go to **“Action”** select **“Download result to CSV”** and rename it has 30119304query3 in your local system.

The screenshot shows the AWS IAM console with a filter applied: 'Total Time Watched' (Number) Greater than 980. A green notification bar indicates 'Completed. Read capacity units consumed: 3.5'. Below, a table lists 5 items returned. The 'Actions' menu is open, and 'Download results to CSV' is highlighted.

	Account Name (String)	Account Age (Number)	Account Country	Account Type	Premium Mem...	Total Income
<input type="checkbox"/>	LeTsHe_Race	8	DE	Follower	N	0
<input type="checkbox"/>	kevin_durfan	4	US	Follower	Y	0
<input type="checkbox"/>	tyler76	6	US	Follower	N	0
<input type="checkbox"/>	xXanatasiaXx	9	DE	Follower	N	4
<input type="checkbox"/>	Climbing_Joel	6	US	Follower	Y	0

- Return the account name for the most successful creator on the platform, in terms of total income.
- For this condition we need to create Index open **30119304-box-stream-db** click on **Indexes**
- Configure the Details:
 - Partition key: Account Type Data type: String
 - Sort Key: Total Income Data Type: Number
 - Index name: Type-Index

The screenshot shows the 'Create global secondary index' page in the AWS IAM console. The 'Index details' section is highlighted with a red box, showing the configuration for the 'Type-Index'.

Index details

Partition key: Account Type Data type: String

Sort key - optional: Total Income Data type: Number

Index name: Type-Index

- Leave other setting as default and click on “Create index” Button.

Estimated read/write capacity cost

Here is the estimated total cost of provisioned read and write capacity for your table and indexes, based on your current settings. To learn more, see [Amazon DynamoDB pricing](#) for provisioned capacity.

Total read capacity units	Total write capacity units	Region	Estimated cost
5	5	us-east-1	US\$2.91 / month

Attribute projections info

Attribute projections

- ☒ **All**
All of the table attributes are projected into the index.
- ☐ **Only keys**
Only the index and primary keys are projected into the index.
- ☐ **Include**
All attributes described in "Only keys" and other non-key attributes that you specify.

During the backfilling phase, you can delete the index that is being created. During this phase, you can't add or delete other indexes on the table.

Cancel **Create index**

- Follow the logic below and click on the **“Run”** button.

DynamoDB **30119304-box-stream-db** **Autopreview** **View table details**

Tables (2)

- Any tag key
- Any tag value
- Find tables by table name
- 30119304-box-stream-db
- sample

Scan or query items

☐ Scan ☒ **Query**

Select a table or index: **Index - Type-index** Select attribute projection: **Specific attributes**

Specific attributes to project: **Account Name** **Add attribute**

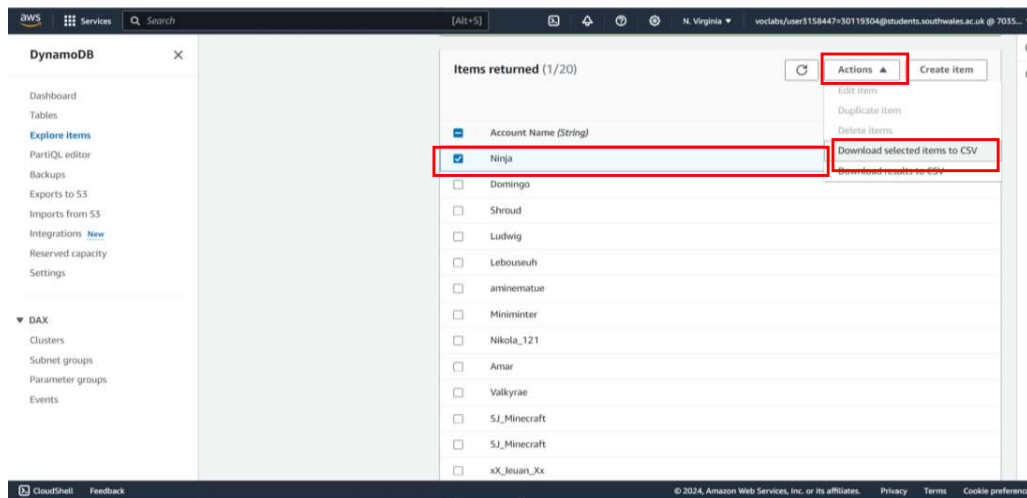
Account Type (Partition key): **Creator**

Total Income (Sort key): **Equal to** **Enter sort key value** **Sort descending**

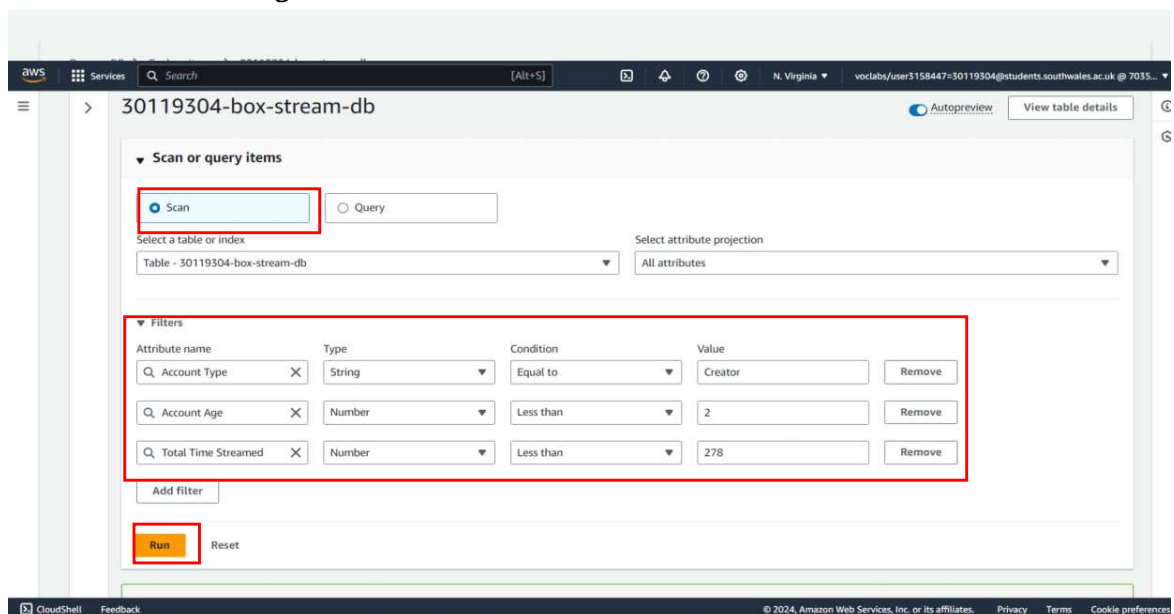
Run **Reset**

Completed. Read capacity units consumed: 3.5

- We got the result select “ninja” click on **“Action”** select **“Download selected items to CSV”** and rename it has 30119304query4 in your local system.



- Return the total income data for creator accounts that have streamed for less than 278 hours and have streamed for less than two years.
- Follow the logic below and click on the **“Run”** button.



- We got the result now go to **“Action”** select **“Download result to CSV”** and rename it has 30119304query4 in your local system.

Attribute name | Type | Condition | Value

Attribute name	Type	Condition	Value
Account Type	String	Equal to	Creator
Account Age	Number	Less than	2
Total Time Stream	Number	Less than	278

Run Reset

Completed. Read capacity units consumed: 3.5

Items returned (2)

Account Name (String)	Account Age (Number)	Account Country	Account Type
Eliasn97	1	DE	Creator
Gronkh	1	DE	Creator

Actions menu options: Edit item, Duplicate item, Delete items, Download selected items to CSV, Download results to CSV

6. Successfully solved the all the conditions now it is time to upload Result CSV file into 30118304-box-stream-bucket

- Navigate to “S3” click on the “Buckets” in the left corner open the “30118304-box-stream-bucket”

Amazon S3

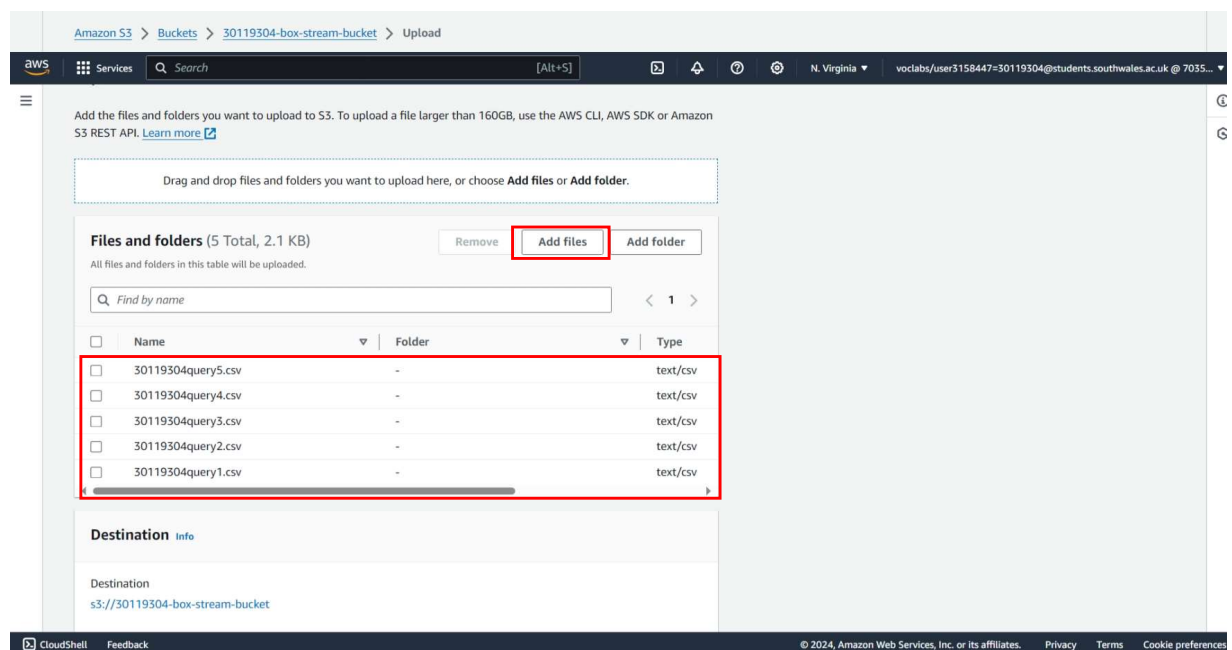
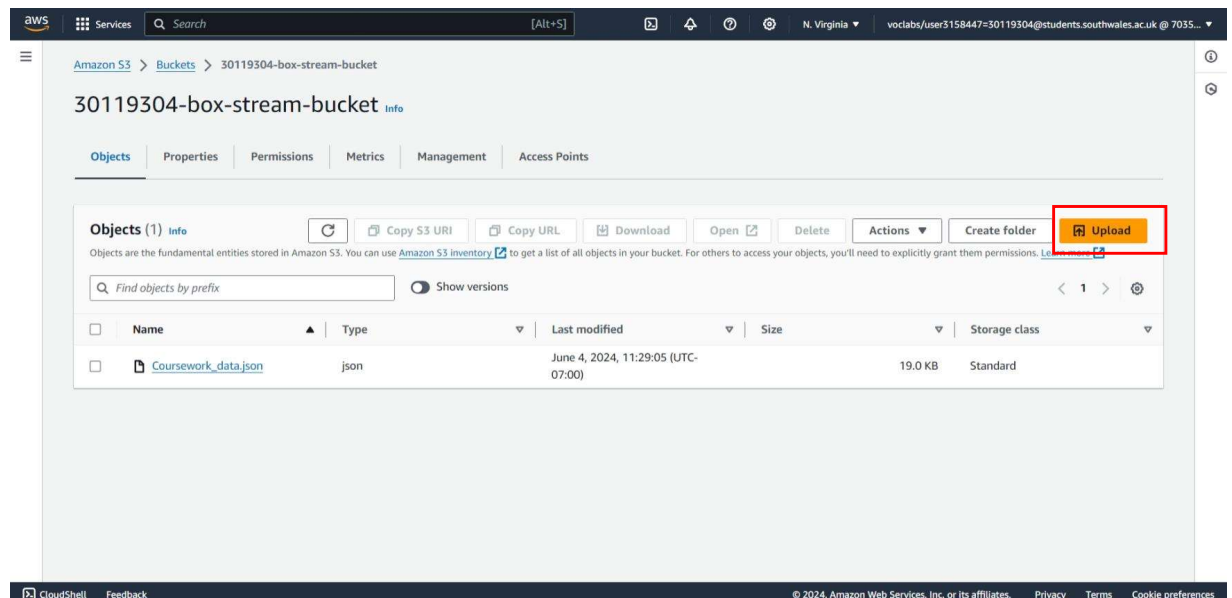
Account snapshot - updated every 24 hours

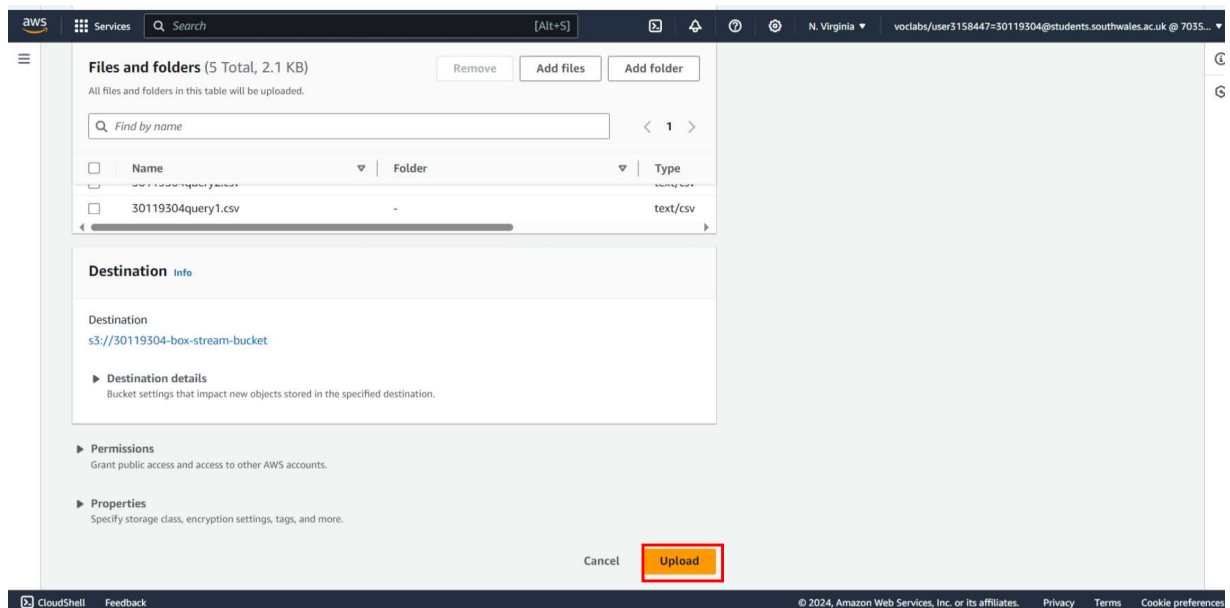
General purpose buckets (2)

Name	AWS Region	IAM Access Analyzer	Creation date
30119304-box-stream-bucket	US East (N. Virginia) us-east-1	View analyzer for us-east-1	May 18, 2024, 12:28:19 (UTC-07:00)
finalone	US East (N. Virginia) us-east-1	View analyzer for us-east-1	May 27, 2024, 14:43:28 (UTC-07:00)

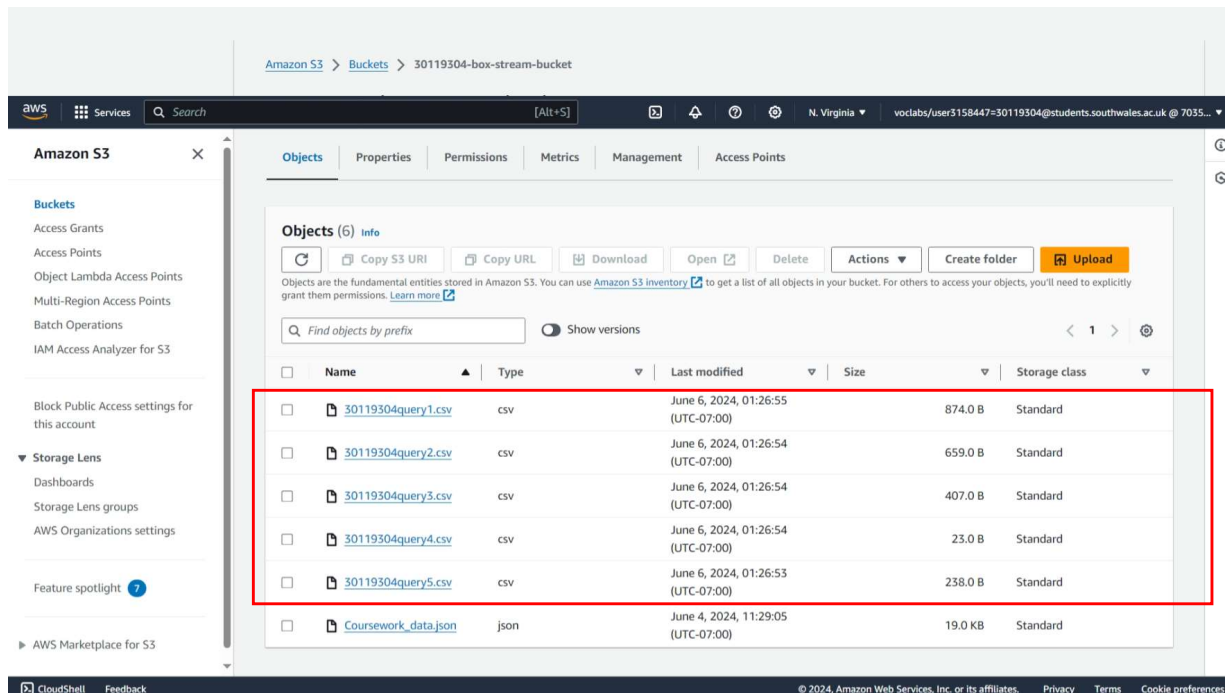
- Click on the “Upload” button and click on “Add files” select **30119304query1.csv** file
- Leave other setting as default then click on “Upload” button
- Repeat above steps to Upload other rest of the files

Note: Make sure you Uploaded all Files called as 30119304query1.csv, 30119304query2.csv, 30119304query3.csv, 30119304query4.csv, 30119304query5.csv





7. Navigate to **"Buckets"** open **"30119304-box-stream-bucket"** now you can see your uploaded file in **30119304-box-stream-bucket**



Congratulation you solved all the conditions and successfully uploaded resulted CSV file into your bucket (30119304-box-stream-bucket)