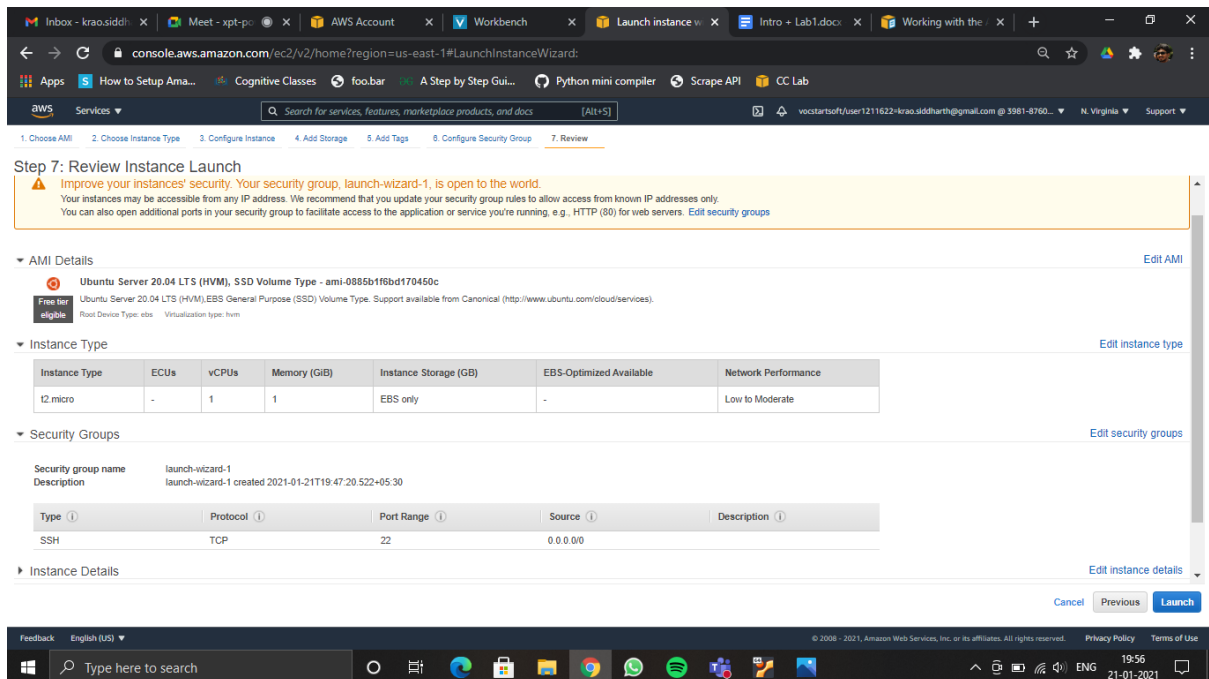


CLOUD COMPUTING LAB: WEEK 1

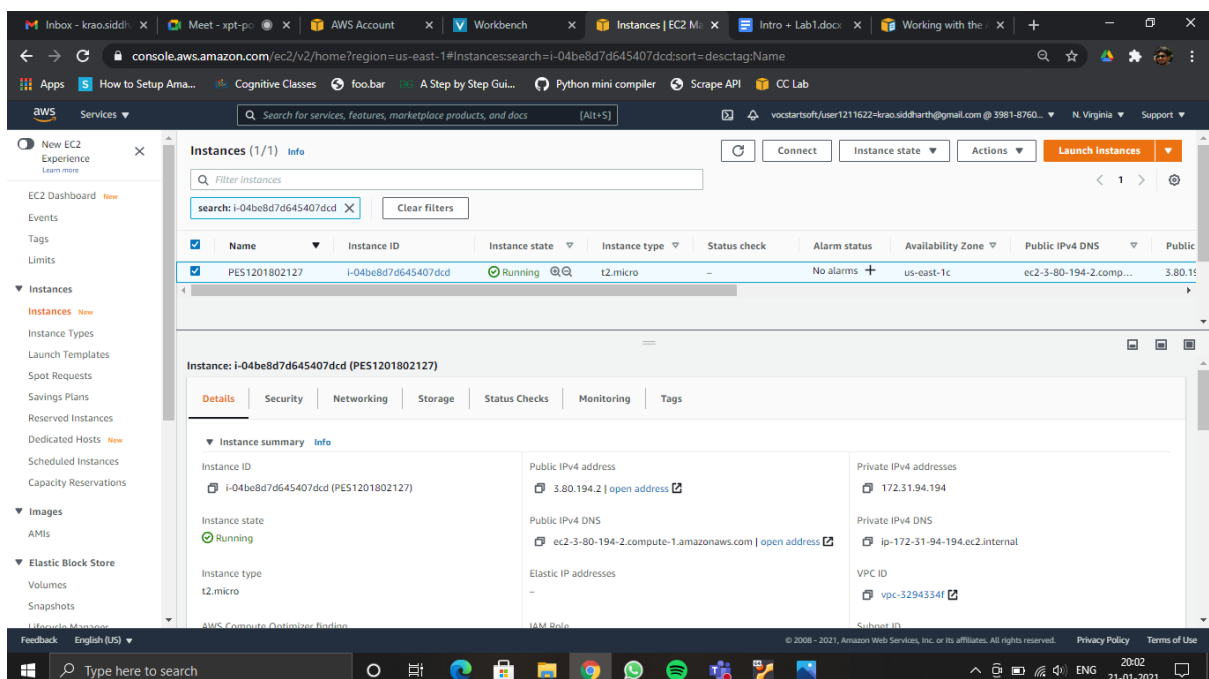
PES1201802127

Siddharth K Rao

1.) Understanding and creating AWS EC2(Elastic Compute) virtual machines.



1b1



1b2

```
ubuntu@ip-172-31-94-194: ~  
ubuntu@ip-172-31-94-194:~$ cat hello-world.c  
#include <stdio.h>  
int main()  
{  
    printf("Hello World\n");  
}  
ubuntu@ip-172-31-94-194:~$ gcc hello-world.c  
ubuntu@ip-172-31-94-194:~$ ./a.out  
Hello World  
ubuntu@ip-172-31-94-194:~$
```

1b3

2.) Understanding and using AWS EBS (Elastic Block Store).

The screenshot shows the AWS Management Console interface for the Elastic Block Store (EBS) section. The left sidebar contains navigation links for various AWS services, including Instances, Images, and Elastic Block Store. The main content area displays a table of EBS volumes. The selected volume is 'vol-0b34086bf9a37ff56' (PES1201802127_ebs), which is 10 GiB, gp2 type, 100 IOPS, and is in the 'available' state. The console also shows the volume's description, status checks, monitoring, and tags.

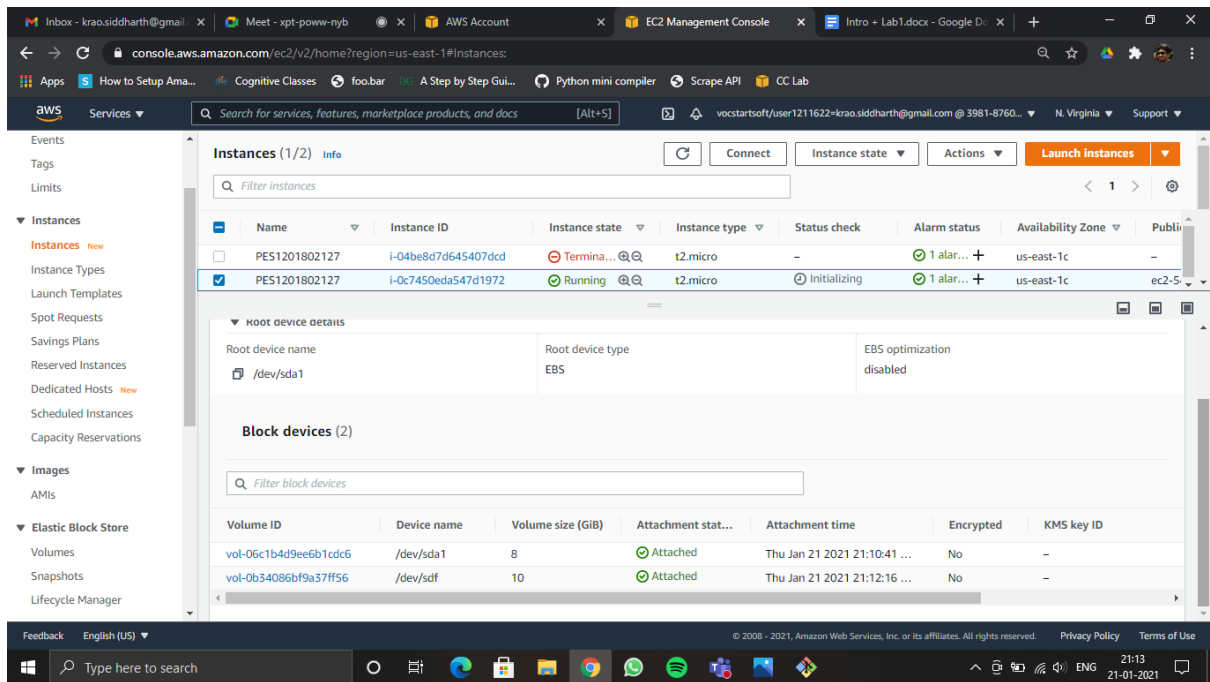
Name	Volume ID	Size	Volume Type	IOPS	Throughput	Snapshot	Created	Availability Zone	State	Allocated Space
PES1201802127_ebs	vol-0b34086bf9a37ff56	10 GiB	gp2	100	-	snap-0846ce4...	January 21, 2021 at...	us-east-1c	available	Non

Volumes: vol-0b34086bf9a37ff56 (PES1201802127_ebs)

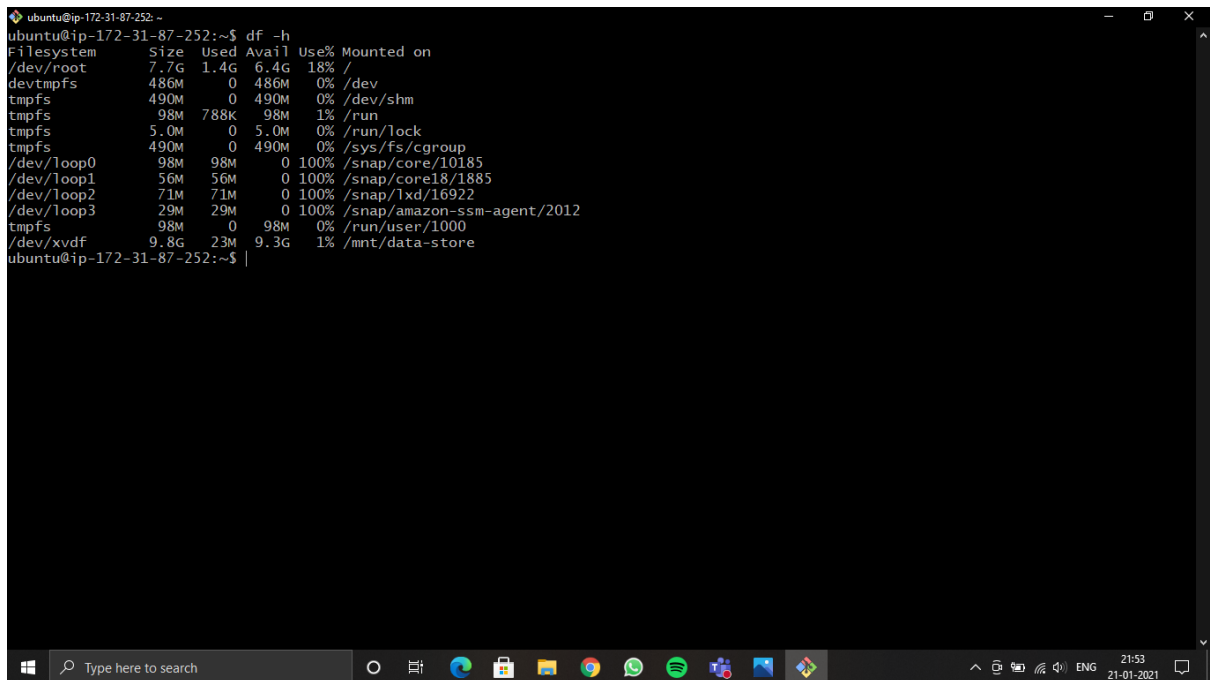
Description: Volume ID: vol-0b34086bf9a37ff56, Alarm status: None, Snapshot: -, Availability Zone: us-east-1c, Encryption: Not Encrypted, KMS Key ID: -, KMS Key ARN: -, Throughput (MB/s): -

Attachment information: Outposts ARN: -, Size: 10 GiB, Created: January 21, 2021 at 9:11:41 PM UTC+5:30, State: available, Volume type: gp2, Product codes: -, IOPS: 100, Multi-Attach Enabled: No

1c1



1c2



1c3

Create Snapshot Actions

Owned By Me Filter by tags and attributes or search by keyword

Name	Snapshot ID	Size	Description	Status	Started	Progress
PES1201802...	snap-08862a5178c8184bc	10 GiB	Snapshot of my volume	completed	January 21, 2021 at 10:03:07 PM UTC+5:30	available (100%)

Snapshot: snap-08862a5178c8184bc (PES1201802127_ebs)

Description Permissions Tags

Snapshot ID	snap-08862a5178c8184bc	Progress	100%
Status	completed	Capacity	10 GiB
Volume	vol-0b34086bf9a37f156	Encryption	Not Encrypted
Started	January 21, 2021 at 10:03:07 PM UTC+5:30	KMS Key ID	-
Owner	398187607173	KMS Key Aliases	-
Product codes	Loading...	KMS Key ARN	-
Description	Snapshot of my volume	Fast Snapshot Restore	-

1c4

Create Volume Actions

Filter by tags and attributes or search by keyword

Name	Volume ID	Size	Volume Type	IOPS	Throughput	Snapshot	Created	Availability Zone	State	Alarm
	vol-06c1b4d...	8 GiB	gp2	100	-	snap-0846ce4...	January 21, 2021 at...	us-east-1c	in-use	Non
SNAPSHOT	vol-029802d...	10 GiB	gp2	100	-	snap-08862a5...	January 21, 2021 at...	us-east-1c	available	Non
PES1201802127_ebs	vol-0b34086...	10 GiB	gp2	100	-	-	January 21, 2021 at...	us-east-1c	in-use	Non

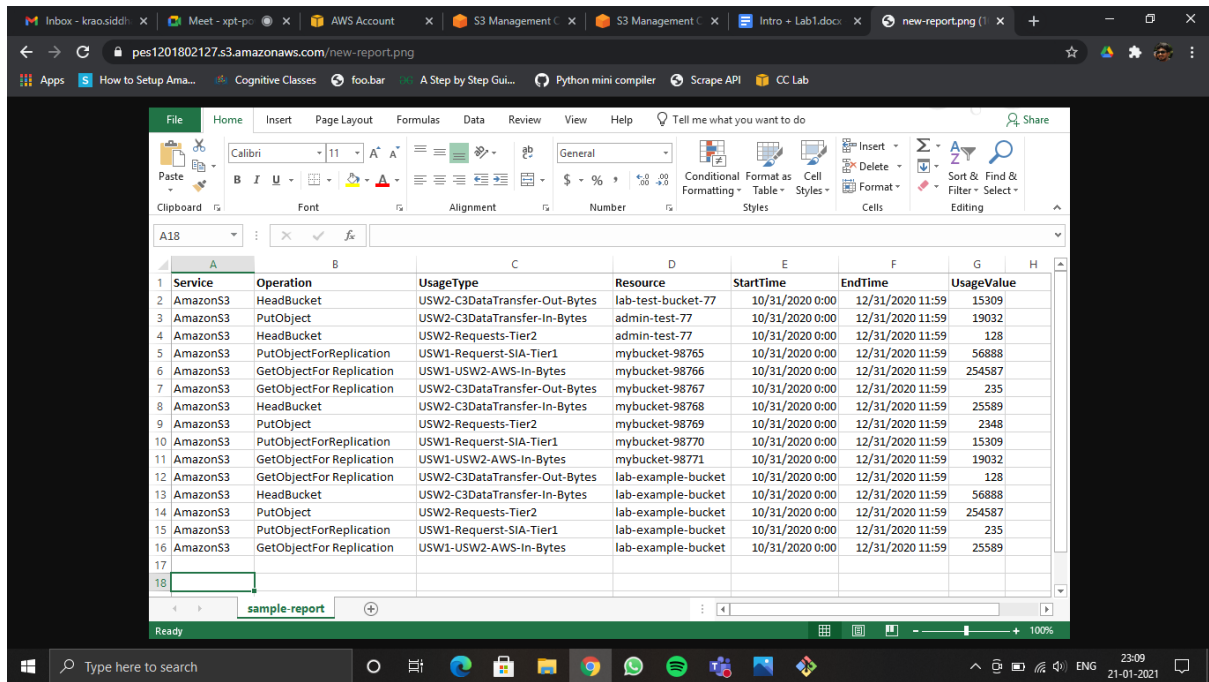
Volumes: vol-029802d41e355cf79 (SNAPSHOT)

Description Status Checks Monitoring Tags

Volume ID	vol-029802d41e355cf79	Outposts ARN	-
Alarm status	None	Size	10 GiB
Snapshot	snap-08862a5178c8184bc	Created	January 21, 2021 at 10:06:50 PM UTC+5:30
Availability Zone	us-east-1c	State	available
Encryption	Not Encrypted	Attachment information	-
KMS Key ID	-	Volume type	gp2
KMS Key Aliases	-	Product codes	-
KMS Key ARN	-	IOPS	100
Throughput (MB/s)	-	Multi-Attach Enabled	No

1c5

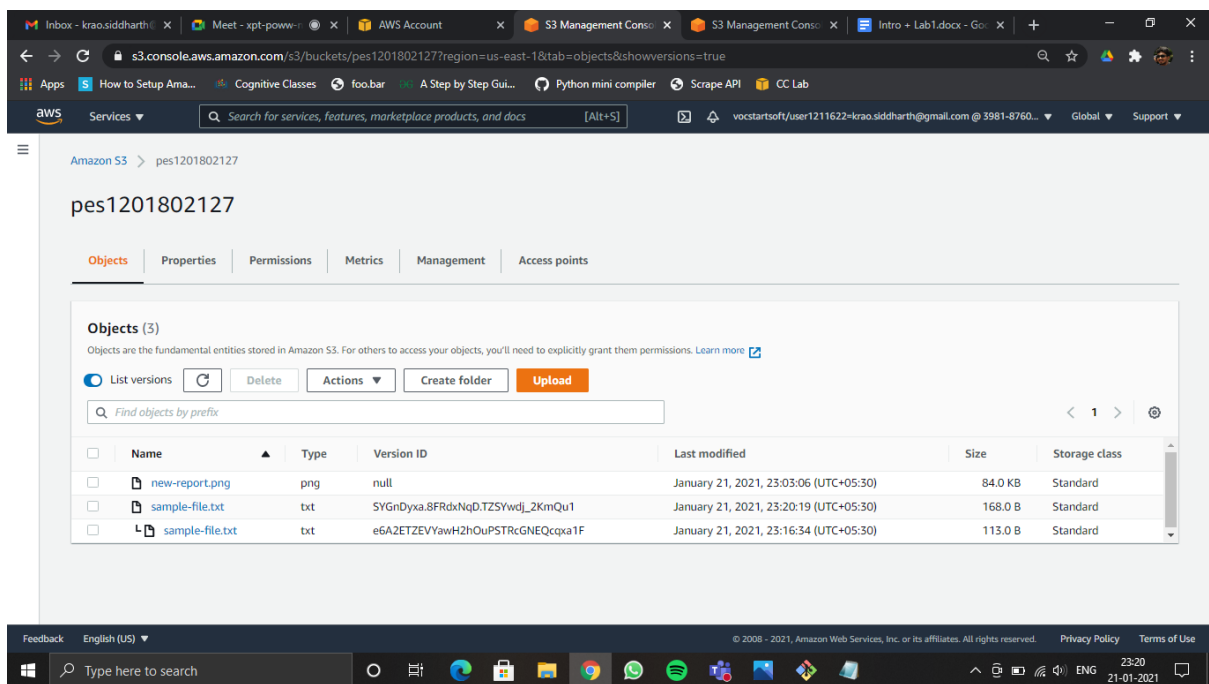
3.) Object Storage using S3 Buckets.



The screenshot shows a Microsoft Excel spreadsheet titled 'sample-report'. The data is organized into columns: Service, Operation, UsageType, Resource, StartTime, EndTime, and UsageValue. The rows list various S3 operations performed by 'AmazonS3' on different buckets, including 'lab-test-bucket-77', 'admin-test-77', 'mybucket-98765', 'mybucket-98766', 'mybucket-98767', 'mybucket-98768', 'mybucket-98769', 'mybucket-98770', 'mybucket-98771', 'lab-example-bucket', and 'lab-example-bucket-2'. The operations include 'HeadBucket', 'PutObject', 'PutObjectForReplication', 'GetObjectForReplication', and 'GetObject'. The usage values range from 128 to 56888.

Service	Operation	UsageType	Resource	StartTime	EndTime	UsageValue
AmazonS3	HeadBucket	USW2-C3DataTransfer-Out-Bytes	lab-test-bucket-77	10/31/2020 0:00	12/31/2020 11:59	15309
AmazonS3	PutObject	USW2-C3DataTransfer-In-Bytes	admin-test-77	10/31/2020 0:00	12/31/2020 11:59	19032
AmazonS3	HeadBucket	USW2-Requests-Tier2	admin-test-77	10/31/2020 0:00	12/31/2020 11:59	128
AmazonS3	PutObjectForReplication	USW1-Request-SIA-Tier1	mybucket-98765	10/31/2020 0:00	12/31/2020 11:59	56888
AmazonS3	GetObjectForReplication	USW1-USW2-AWS-In-Bytes	mybucket-98766	10/31/2020 0:00	12/31/2020 11:59	254587
AmazonS3	GetObjectForReplication	USW2-C3DataTransfer-Out-Bytes	mybucket-98767	10/31/2020 0:00	12/31/2020 11:59	235
AmazonS3	HeadBucket	USW2-C3DataTransfer-In-Bytes	mybucket-98768	10/31/2020 0:00	12/31/2020 11:59	25589
AmazonS3	PutObject	USW2-Requests-Tier2	mybucket-98769	10/31/2020 0:00	12/31/2020 11:59	2348
AmazonS3	PutObjectForReplication	USW1-Request-SIA-Tier1	mybucket-98770	10/31/2020 0:00	12/31/2020 11:59	15309
AmazonS3	GetObjectForReplication	USW1-USW2-AWS-In-Bytes	mybucket-98771	10/31/2020 0:00	12/31/2020 11:59	19032
AmazonS3	GetObjectForReplication	USW2-C3DataTransfer-Out-Bytes	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	128
AmazonS3	HeadBucket	USW2-C3DataTransfer-In-Bytes	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	56888
AmazonS3	PutObject	USW2-Requests-Tier2	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	254587
AmazonS3	PutObjectForReplication	USW1-Request-SIA-Tier1	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	235
AmazonS3	GetObjectForReplication	USW1-USW2-AWS-In-Bytes	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	25589

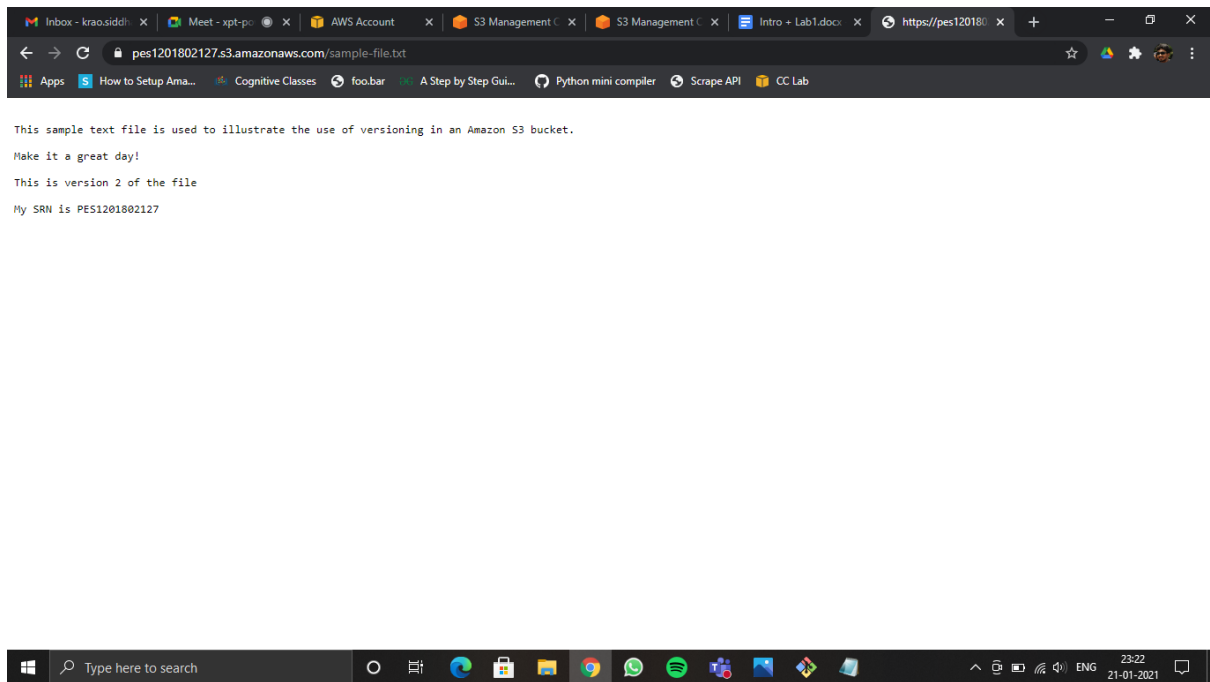
1d1



The screenshot shows the AWS S3 console interface for a bucket named 'pes1201802127'. The 'Objects' tab is selected, displaying a list of three objects: 'new-report.png', 'sample-file.txt', and 'sample-file.txt'. The table includes columns for Name, Type, Version ID, Last modified, Size, and Storage class.

Name	Type	Version ID	Last modified	Size	Storage class
new-report.png	png	null	January 21, 2021, 23:03:06 (UTC+05:30)	84.0 KB	Standard
sample-file.txt	txt	SYGnDyxa.8FRdxNgD.TZSYwdj_2KmQu1	January 21, 2021, 23:20:19 (UTC+05:30)	168.0 B	Standard
sample-file.txt	txt	e6A2ETZEVYawH2hOuPSTRcGNEQcqa1F	January 21, 2021, 23:16:34 (UTC+05:30)	113.0 B	Standard

1d2



1d3