EBS-Elastic Block Store

-Go to your instances > select instance > Storage tab > Under block device: Select the volume attached to the EC2 instance > Create Volume:

-select the following options: **General purpose SSD(gp2) >** Size**: 2 GiB >** Select the same availability zone as your Ec2 instance (us-east-1) > Create volume

-Once the volume is running: Attach it to your running EC2 instance:

-Go to EC2 instance & terminate your instance: go back to Elastic Block store & **note that the volume is also terminated -** lpre-set when launching our EC2 instance

EBS Snapshots

-Make a backup(snapshot) of your EBS volume at a point in time

-Go to Elastic block store> select volume & hit actions > **Create Snapshot >** add description of the snapshot > Create snapshot

-Go to Snapshot under EBS > select snapshot & right click (copy snapshot) > gives the ability to change the availability zone of the snapshot.

-Next, go to Snapshots > action – create volume from snapshot > allows you to save in a different availability zone> create volume. Go to volumes > both volumes are now running in different A/Z.

-Go to Snapshots > Recycle bin -protects snapshots and Amis from accidental deletion > Retention rules > Create retention rule: name , resource type: EBS snapshot, retention period (1 day), rule lock setting (unlock) > Create retention rule.

-Back to snapshots > delete snapshot > back to recycle bin – the snapshot is stored in the recycle bin for safety measure > recover the snapshot.

Amazon S3 lab

-Search bar >S3 > Create bucket:

-Unique bucket name, select AWS region, Disable ACL's, Block public access to bucket, disable versioning, default settings for encryption> create bucket

-Inside your computer: create a folder: S3 lab & add files such as images & documents:

-Open the bucker & upload 2 files (text, 2 image)

Next add policies to your bucket:

-Open up bucket> permissions> **allow public access** > scroll down to bucket policy (**Edit) >** policy generator: type: **S3 bucket policy**, effect: **allow**, Principal **"*"** =allow, Actions: **GetObject**, Amazon Resource name: (bucket ARM/*) >Add statement> Generate policy: copy & paste into the policy box!

```
{
   "Version": "2012-10-17",
   "Id": "Policy1709231396065",
   "Statement": [
      {
         "Sid": "Stmt1709231388704",
         "Effect": "Allow",
         "Principal": "*",
         "Action": "s3:GetObject",
         "Resource": "arn:aws:s3:::mylabbucket1203/*"
      }
   ]
}
```

publicly view the objects inside your bucket.

S3 Website:

-S3 Bucket > Properties > Static Website Hosting> enable > host static website > index document: index.html > save changes

-upload the below document onto **S3 Lab folder** on your COMPUTER using **index.html** : & then upload document into S3 bucket:

```
<html>
  <head>
    <title>My First Webpage</title>
  </head>
  <body>
    <h1> input personal message</h1>
    <p>customize this section </p>
  </body>

  <img src="your photo.jpg" width=500/>
</html>
```

-S3 Bucket> properties> Bucket website endpoint: click on the link to open up your website.

S3 Versioning:

-S3 Bucket > Properties > enable bucket versioning > save changes

-Open up your index.html & make changes to the personal messages > upload new version

-Toggle on **Show versions** – notice that there are version IDs

-refresh your static hosted website to view changes.

-S3 bucket: Click on the indem.html with version id & delete the second version to get rid of the new changes.