Exercise11
S3 Cross Region Replication (DR use case)

1. Login to your IAM user
2. Create the source bucket:
   Give any name, check *ACLs enabled* (under Object Ownership), uncheck *Block all public access,* check *I acknowledge that the current settings might result in this bucket and the objects within becoming public.,* enable *Bucket Versioning*, disable *Bucket key,* click *Create bucket*
3. Create the destination bucket:
   Give any name, choose Ohio Region, check *ACLs enabled* (under Object Ownership), uncheck *Block all public access,* check *I acknowledge that the current settings might result in this bucket and the objects within becoming public.,* enable *Bucket Versioning*, disable *Bucket key,* click *Create bucket*
4. Configure cross region replication:
   Go to the source bucket, Management tab, click Create replication rule (under Replication rules), give a name, select Apply to all objects in the bucket (under Source bucket), Browse S3 to select the Destination bucket, select Create new role (under IAM role), check *Change the storage class for the replicated objects*, select Standard-IA, click Save. Take a snapshot (with your IAM username) of the Enabled replication rule.
5. Test the replication service:
   i. Go to the source bucket, create a text file and write a line of some text, drag and drop it in the bucket, check *Grant public-read access*, check *I understand the risk of granting public-read access to the specified objects*. (under Permissions), click Upload. Click the Object URL in a new tab. You can see the content. Take a snapshot (with your IAM username) that shows the content of this file in the new tab.
   ii. Go to the destination bucket. You should see the file that you had uploaded in the source bucket. Notice that the file is stored in the Standard-IA storage class. Take a snapshot (with your IAM username) that shows this file in the destination bucket.
6. Modify the object:
   Add a new line in the text file on your computer.
   Go back to the source bucket, Drag and drop the updated text file in your source bucket, make sure you give public read access, press Upload.
   Go to the destination bucket, Click the Object URL of the file in a new tab. You can see the updated content. Take a snapshot (with your IAM username) that shows the content of this file in the new tab.
7. Delete the object:
   Delete the file from the source bucket. Go to the destination bucket. The file can still be seen. This is an expected (rather required) behavior. If someone accidentally deleted an object, its copy should be available. Take a snapshot (with your IAM username) that shows that the file is still there in the destination bucket.
8. Upload all the screenshots from the above steps as indicated. **No points will be awarded if the IAM username is not there in a snapshot. No exceptions!**
9. **Cleanup:**
   a. Empty both the buckets
   b. Delete both the buckets

Sources: https://iaasacademy.com/