Project 3

Scenario

Your company wants to distribute their content in the form of a website to their global offices. However, due to some legal restrictions, you cannot distribute the content in France and Australia. You need to find a way to prevent these offices from accessing the data.

The content does not change very often; however, some of the files are very large, and you have to find a solution to minimize end user latency.

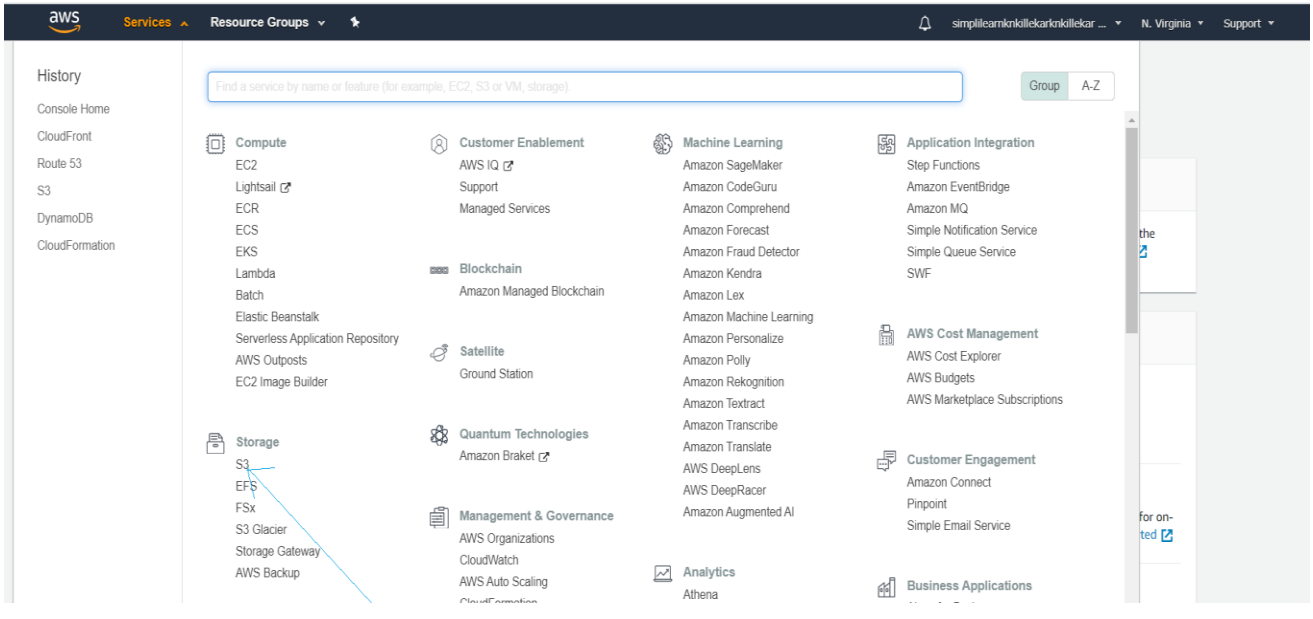
The last requirement is that the audit department wants to track whoever is accessing the website.

Goals of the project

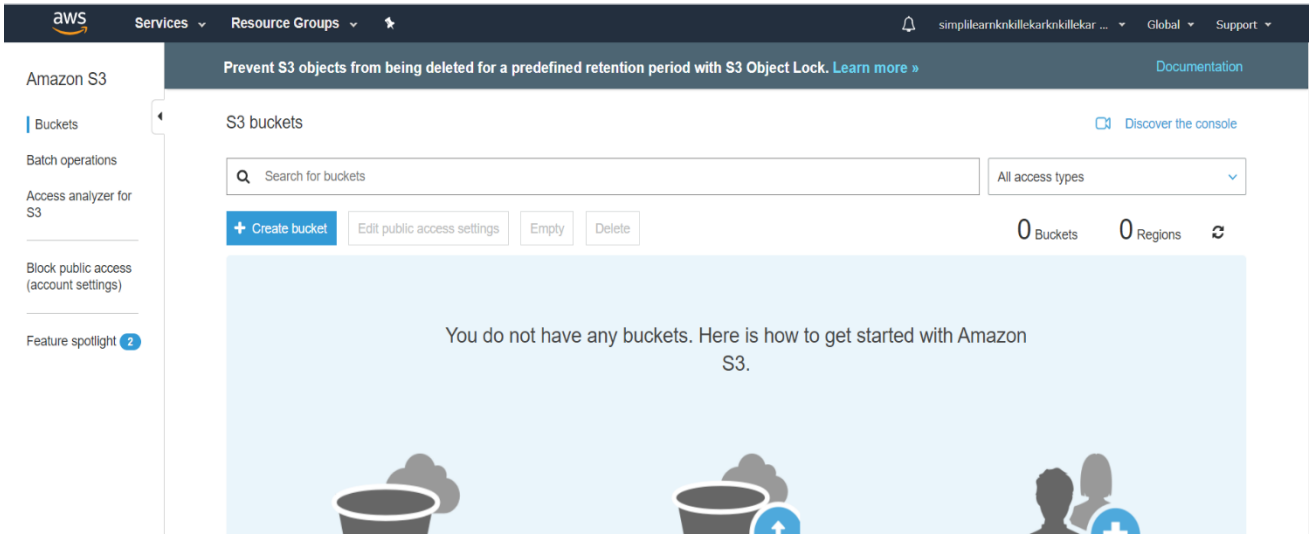
- Set up a static website using Amazon S3.
    1. Create a bucket and enable static website hosting.
    2. Enable logging.
- Set up a CloudFront distribution for the static website with Access Logs enabled.
- Set up Geo Restrictions to prevent users in France and Australia from accessing the data.
- Verify that logging is working.

Solution:

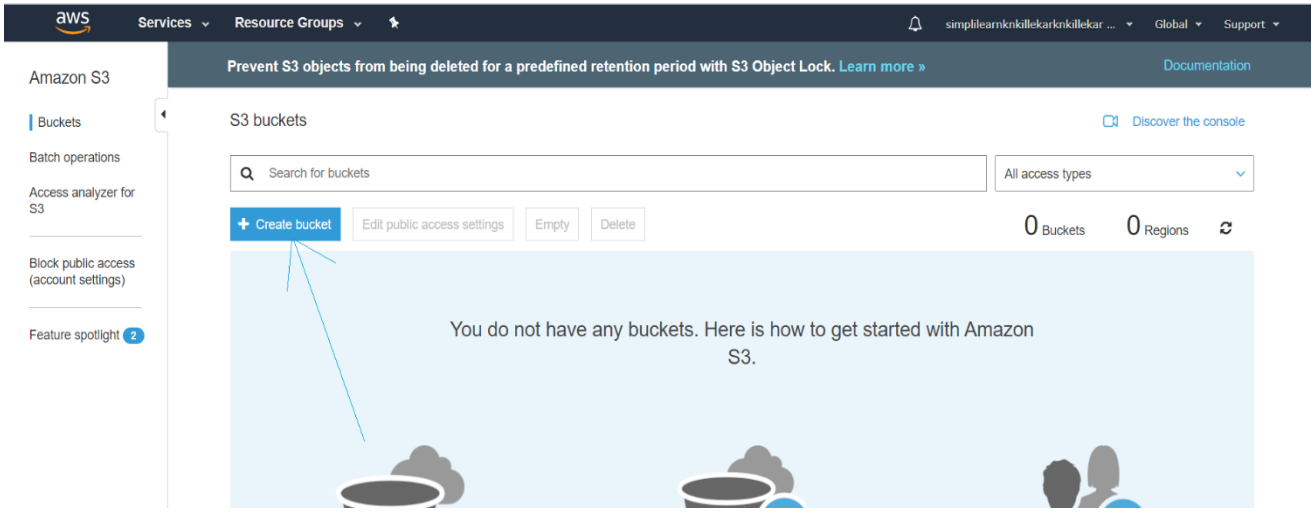
Step 1: Open AWS management console, click on Services. Go to storage section and click on S3 as shown in window below.



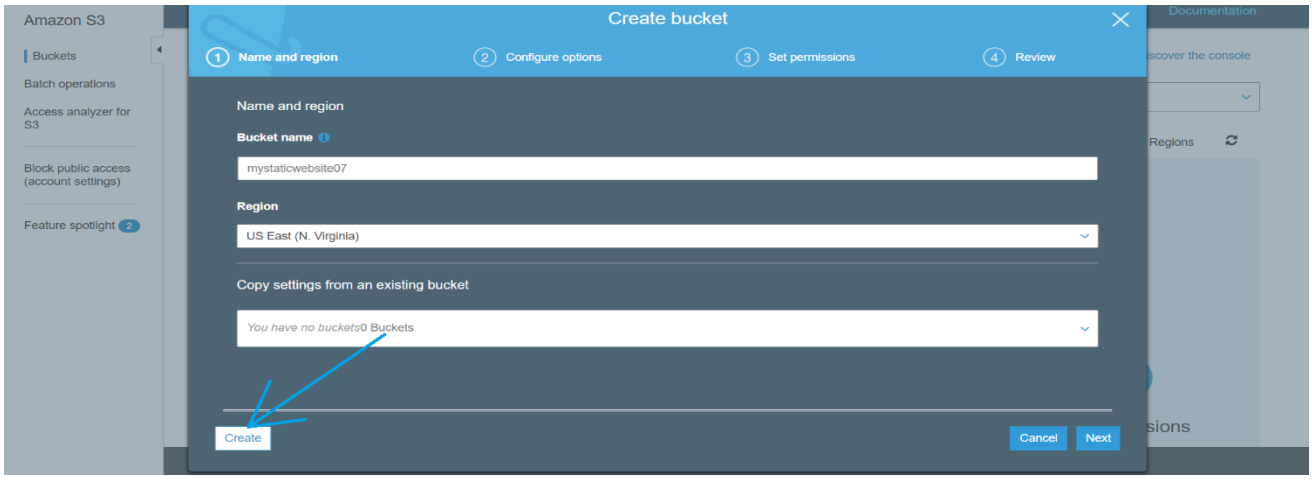
The following window will appear after clicking on S3.



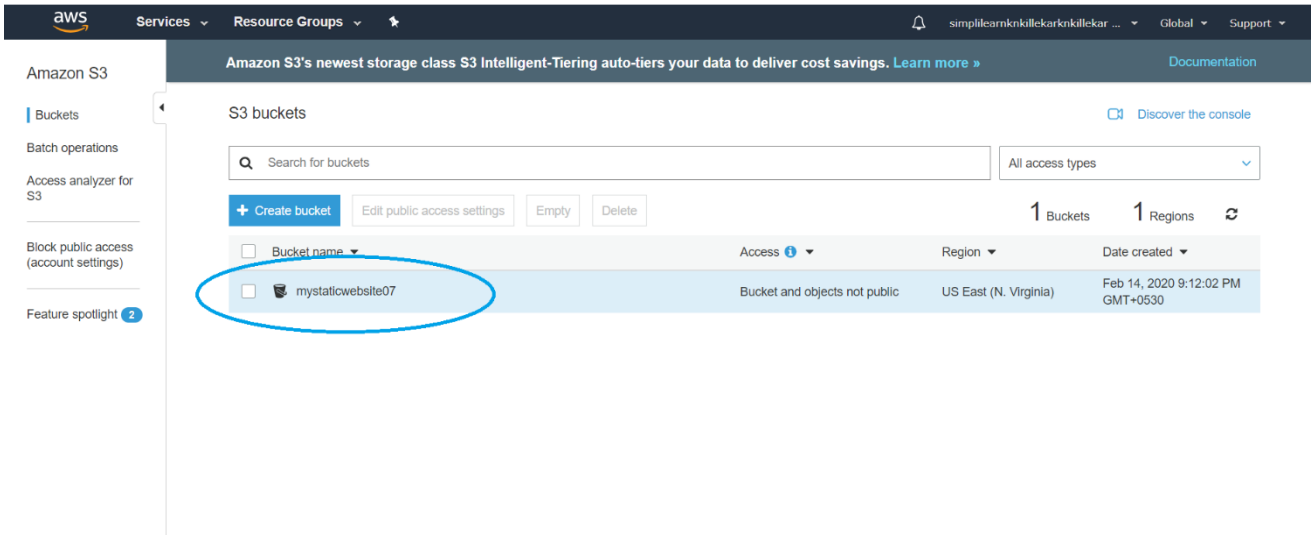
Step 2: Now click on **Create bucket** to create the bucket as shown below.



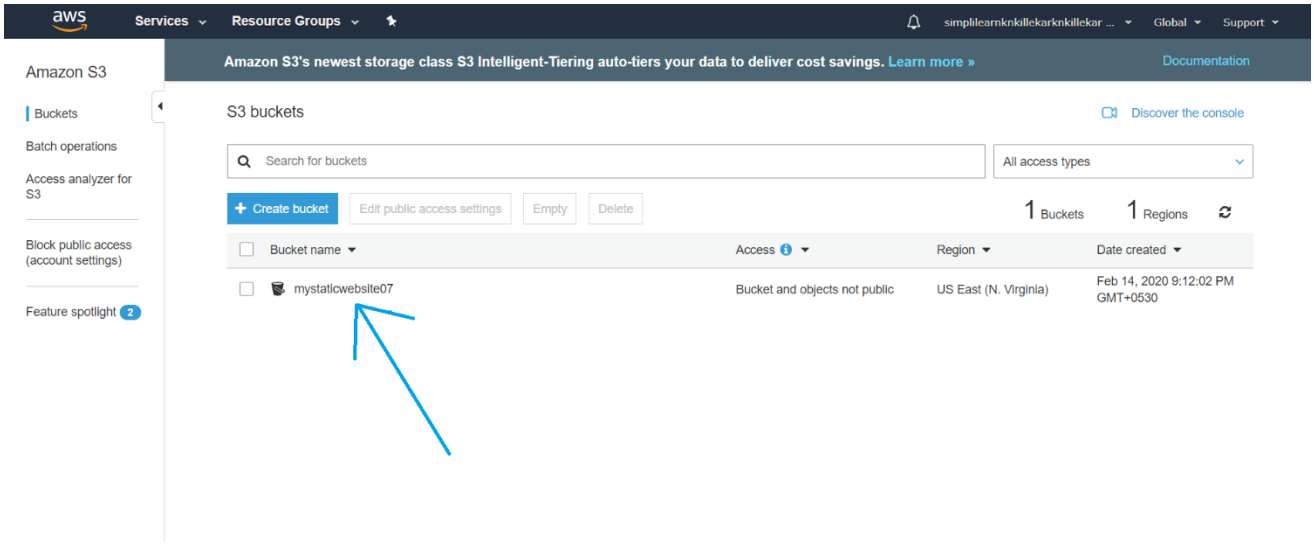
Click on Create bucket the following window will appear and enter the details as shown in the window below. The bucket name is **"mystaticwebsite07"** and region as "US East(North Virginia).After entering the details click on **Create** option as shown below.



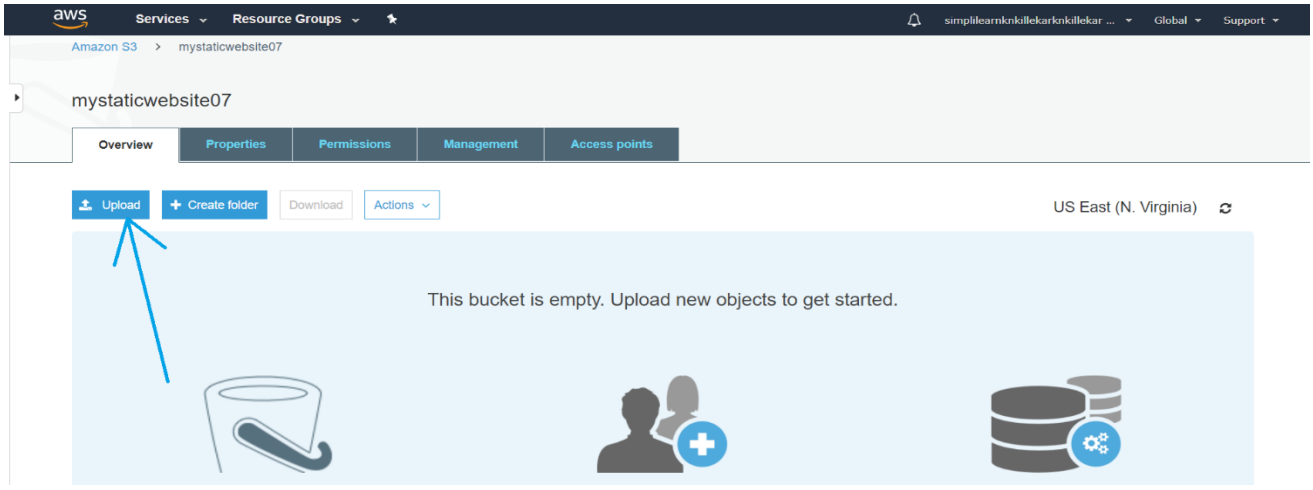
The bucket **"mystaticwebsite07"** is created successfully as shown in the window below.



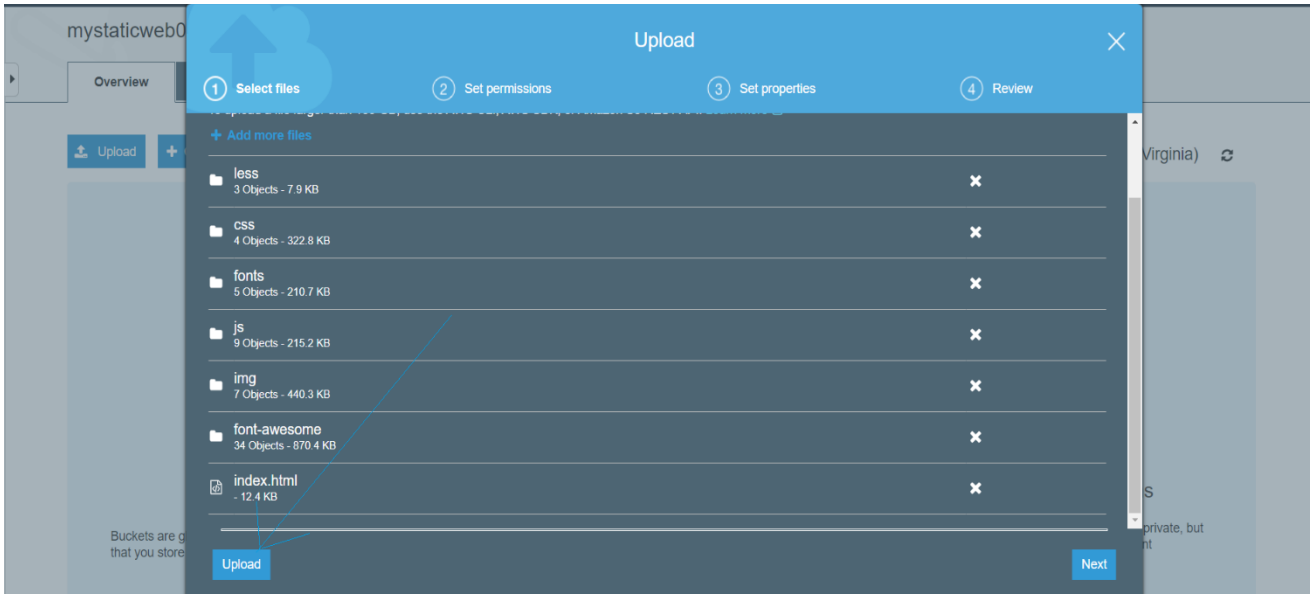
Step 3: To upload the static website files, click on the bucket name **"mystaticwebsite07"** as shown in the window below.



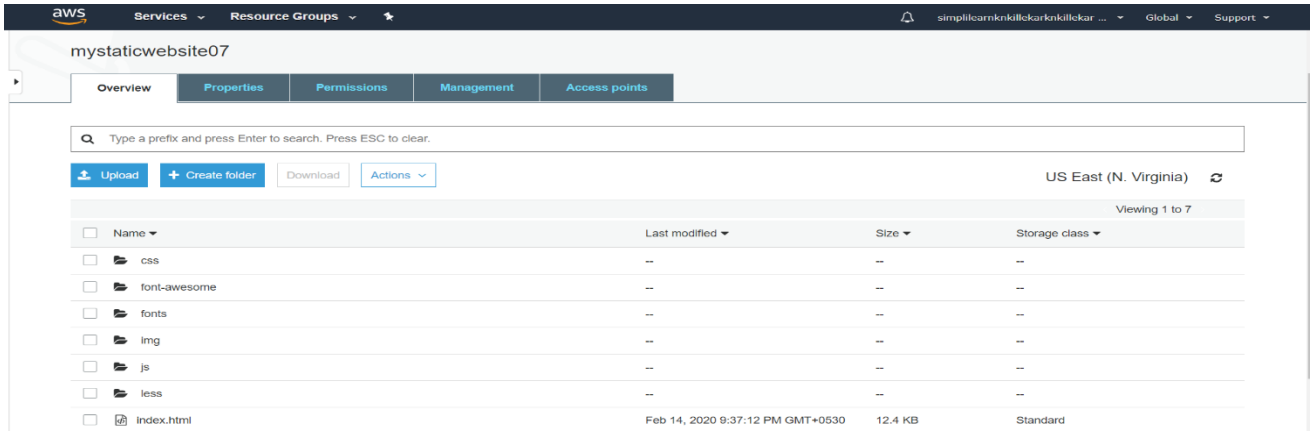
The following window will appear and select the upload option as shown below.



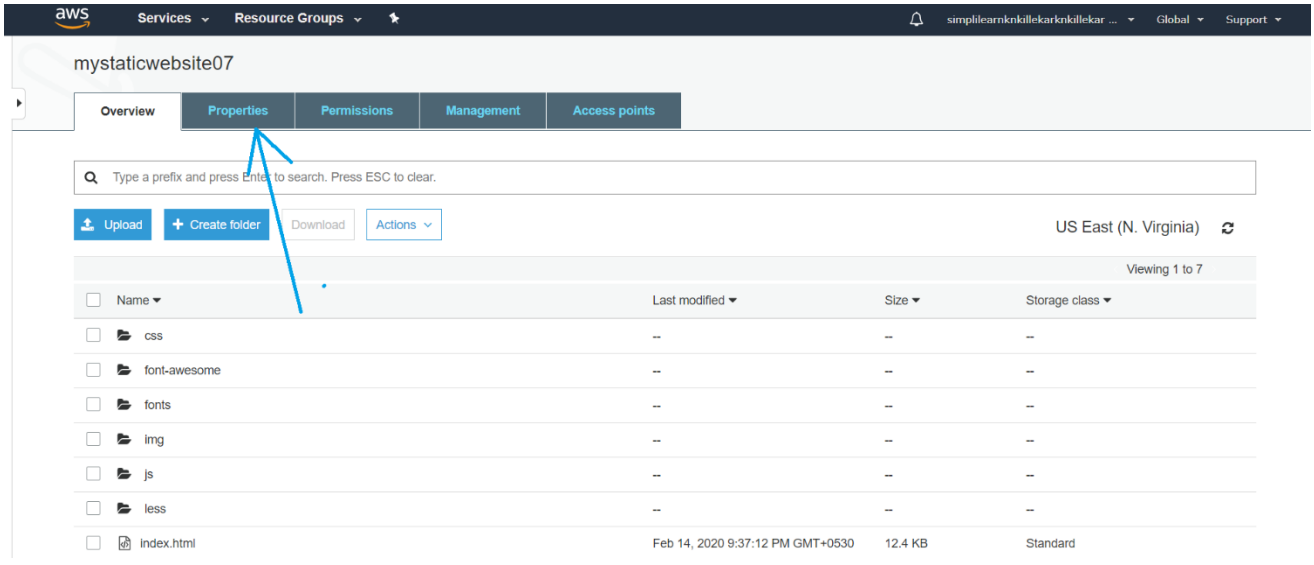
A window will appear as shown below and click on **"Add files" or "Drag & Drop"** the static website files from the local drive to the bucket created in last step. The following window will appear after adding files as shown below and click on **"Upload"** option.



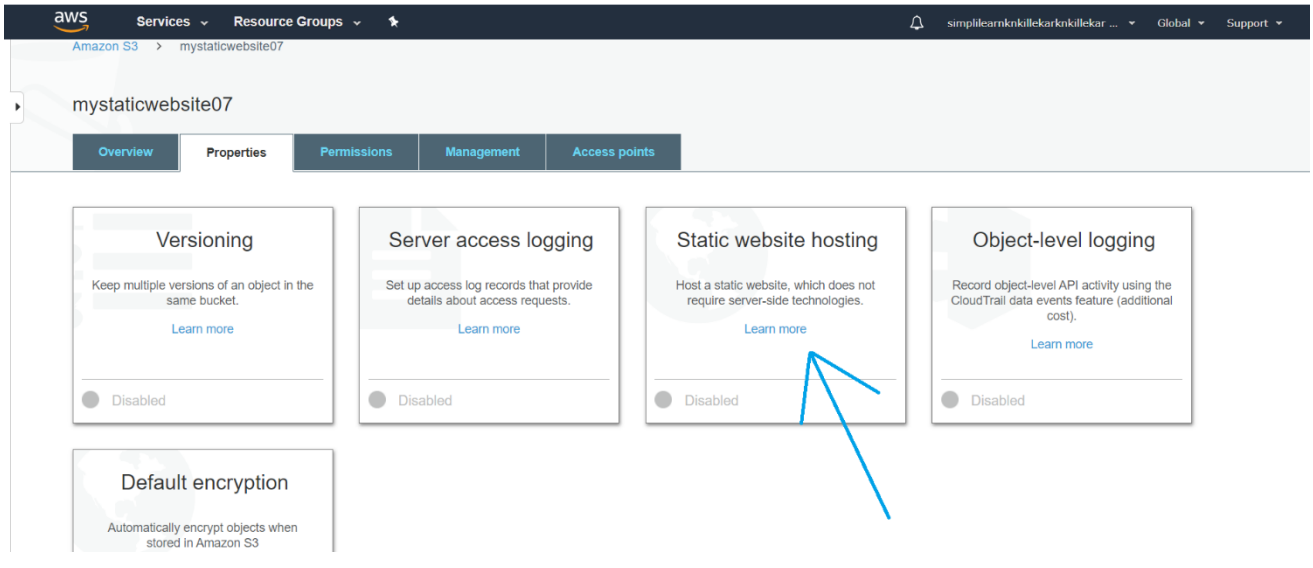
It will take couple of minutes to upload the files in the bucket. After the successful upload, the following window will display.



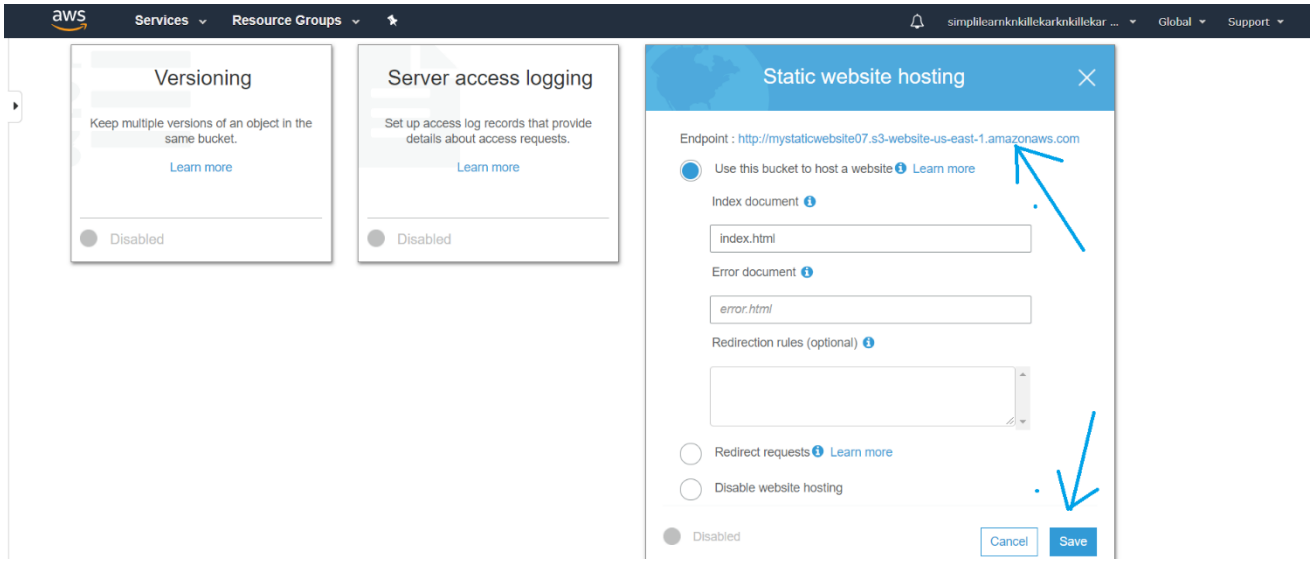
Step 4: To enable the static website hosting, click on the **"Properties"** tab as shown in the window below.



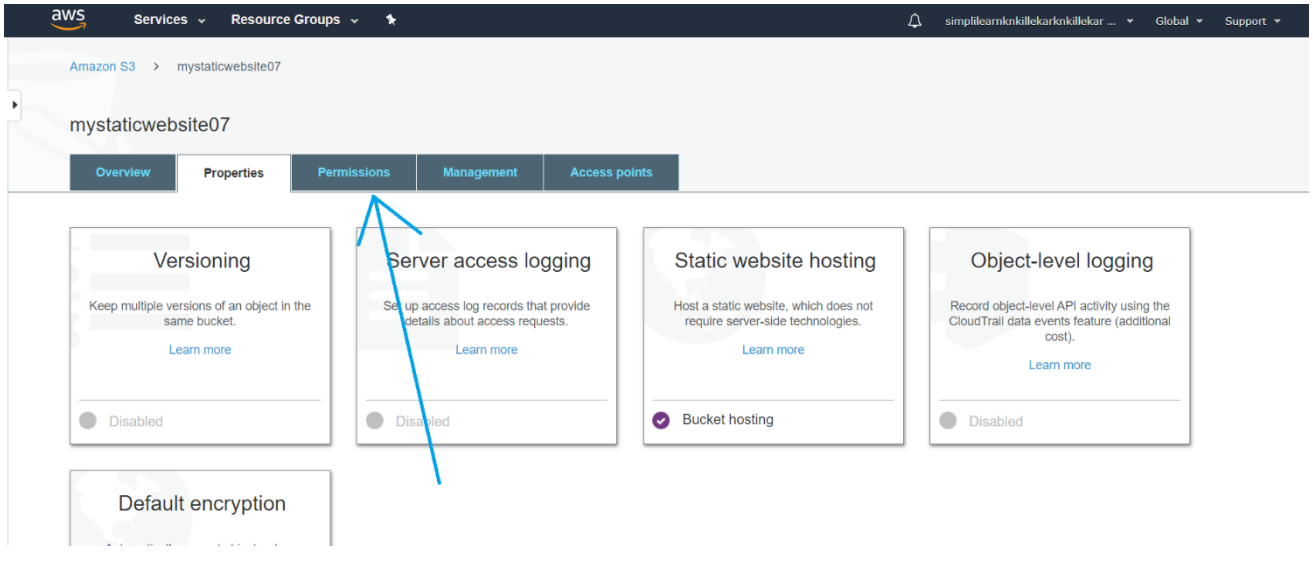
Click on **"Properties"** tab, a window will appear as shown below and select **"Static website hosting"** option as shown below.



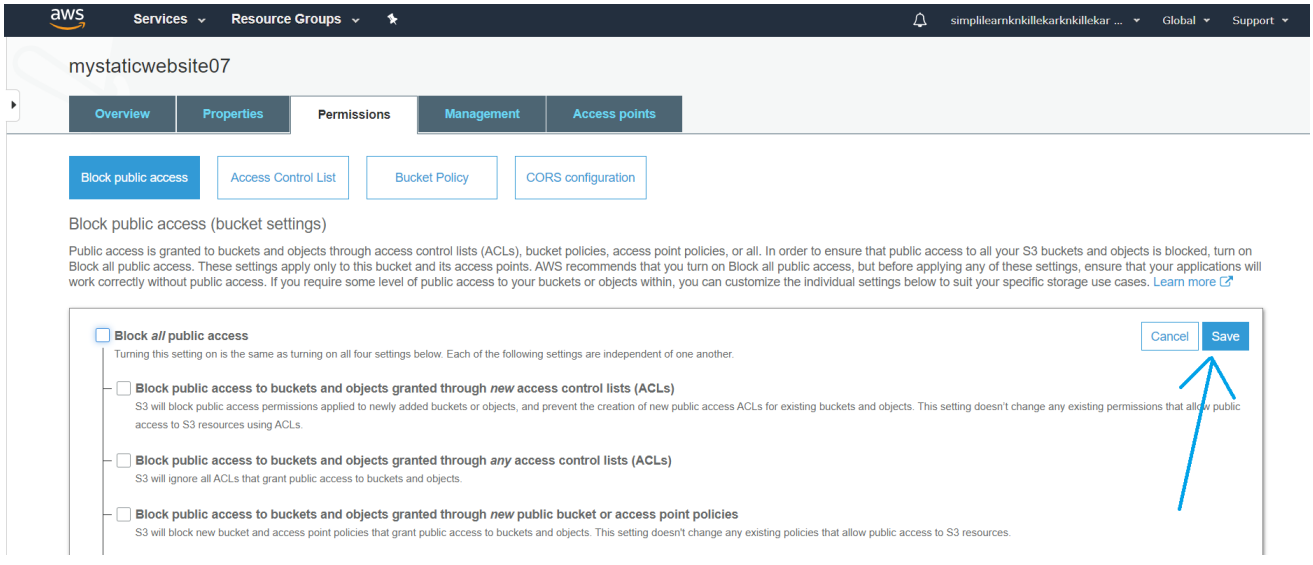
Now click on **"Static website hosting"** select **"Use this bucket to host a website"** option and enter the following details and copy the Endpoint as shown in the window below and click on **"Save"** option.



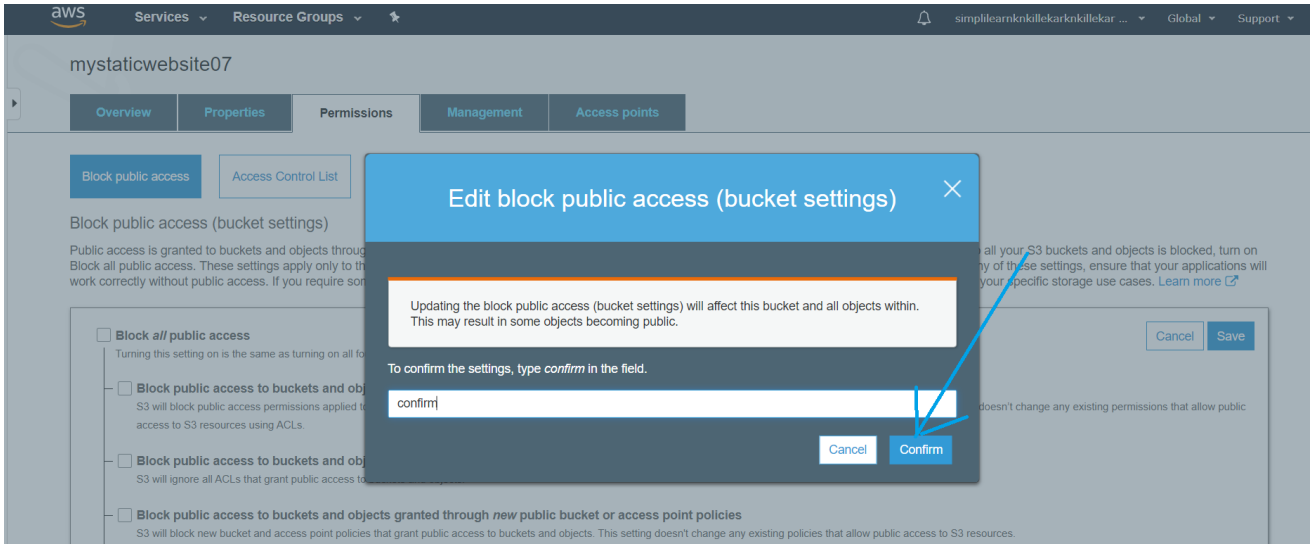
Step 5: Now go to "Permissions" tab to set the permission to access the website as shown below.



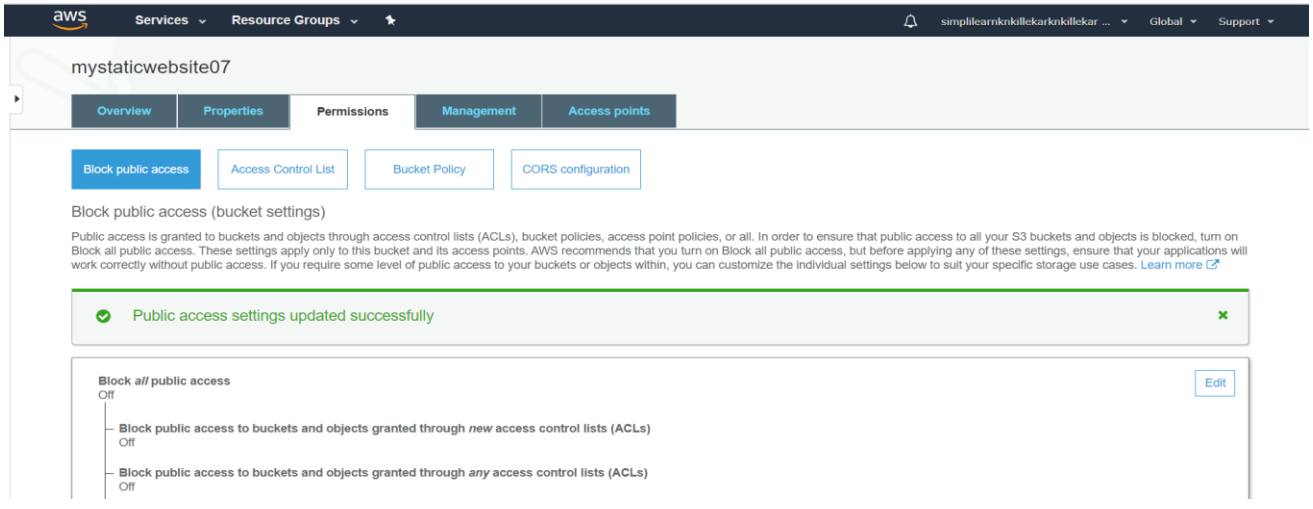
After selecting Permission tab go to **“Block public access”** option and click on **“Edit”** option as shown below. Uncheck the “Block all public access” option and click on **“Save”** option.



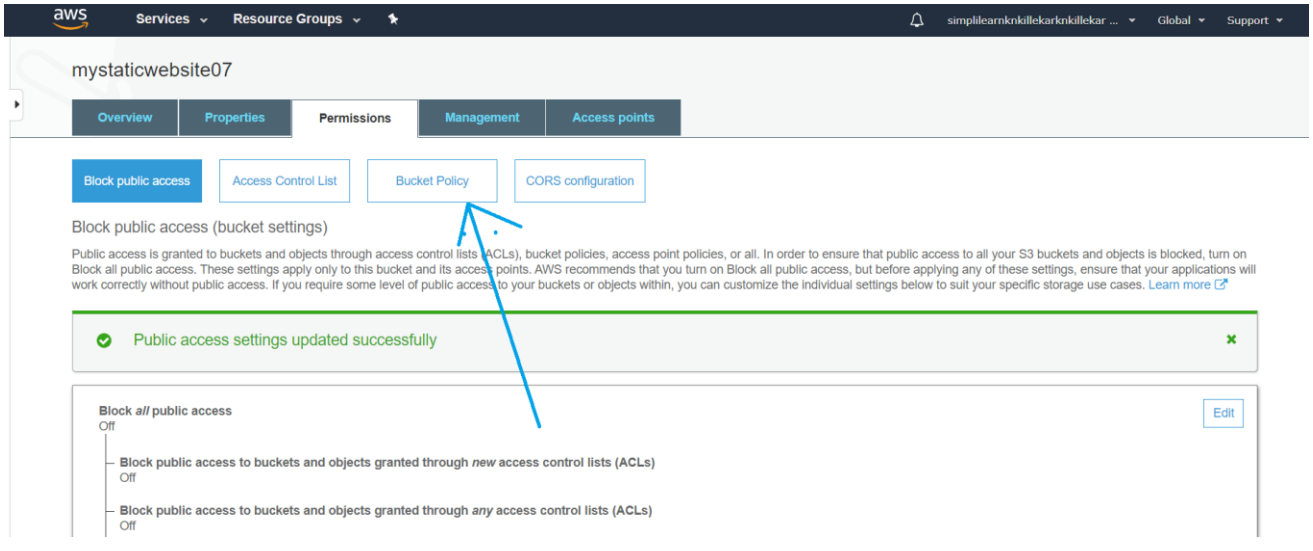
After saving, a window will appear and type “confirm” in the field and click on confirm as shown in the window below.



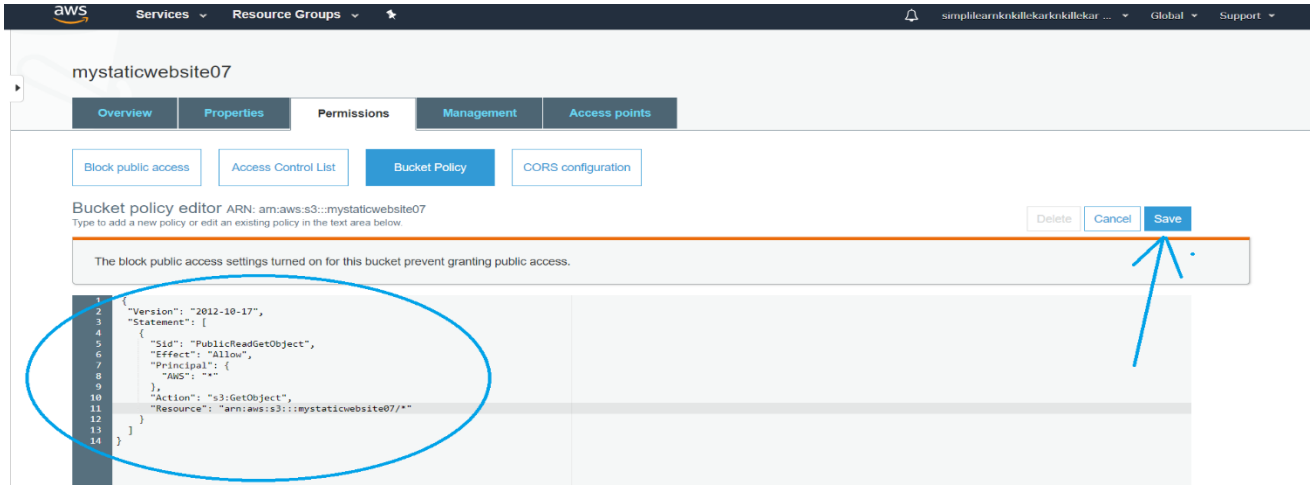
A window will appear with the message **"Public access settings updated successfully"** as shown below.



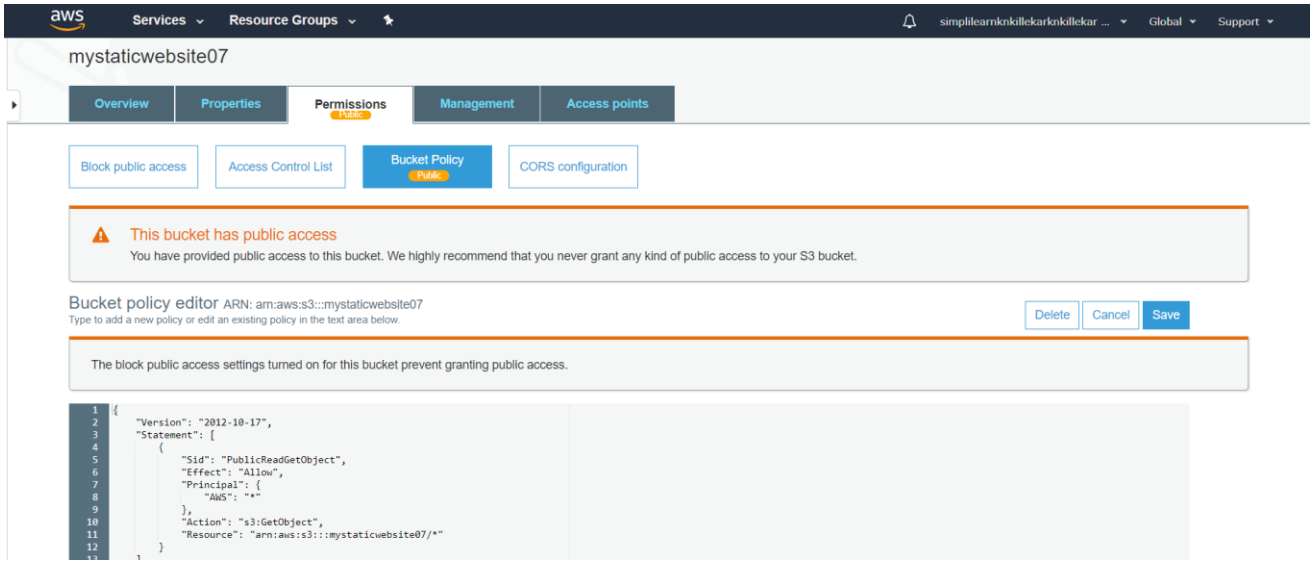
Step 6: Next, go to "Bucket Policy" tab as shown below.



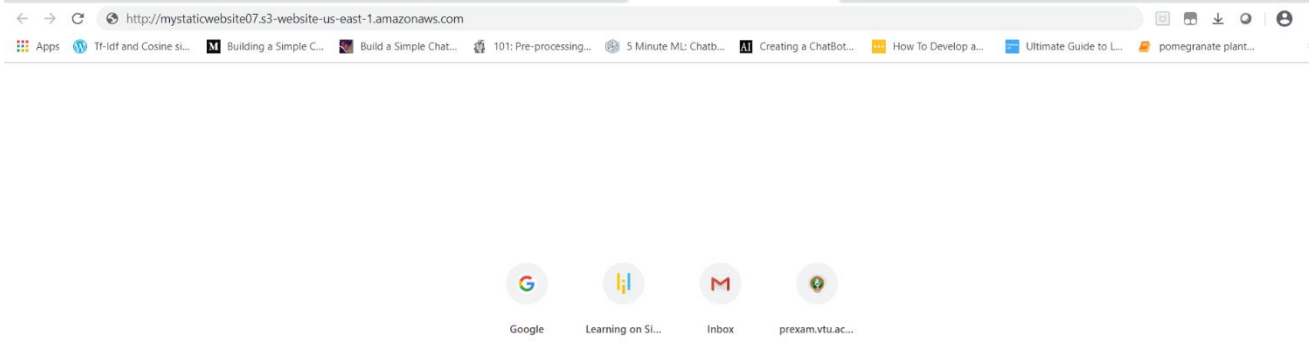
Write the Bucket policy as shown in the window below and click on "Save" option.



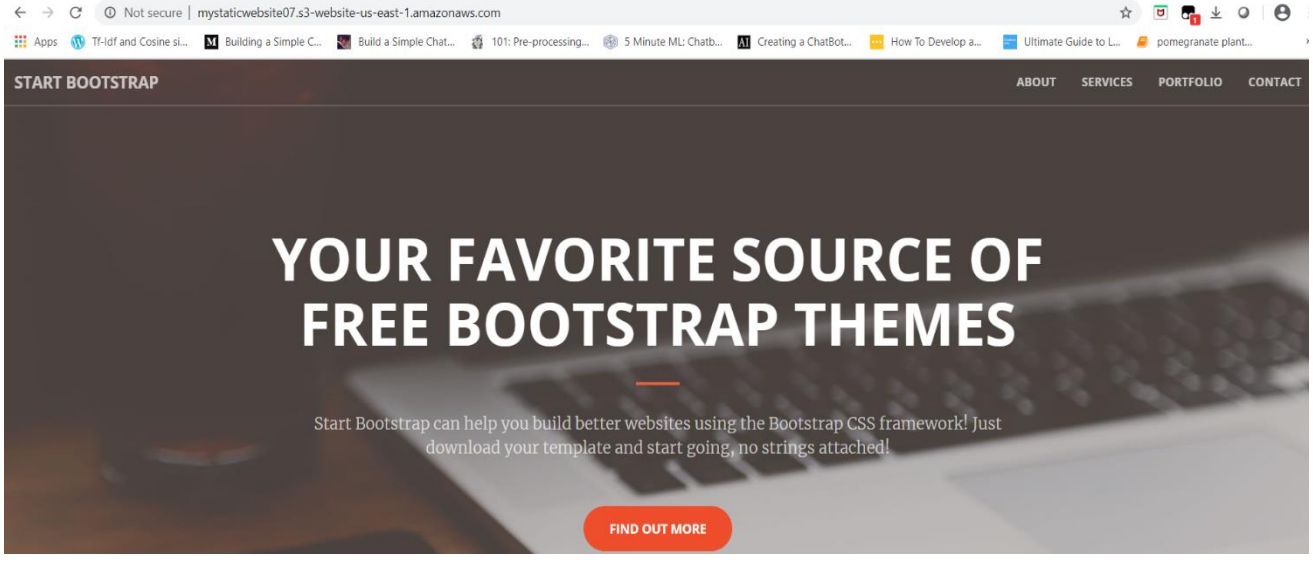
Now the bucket has the public access as shown in the window below.



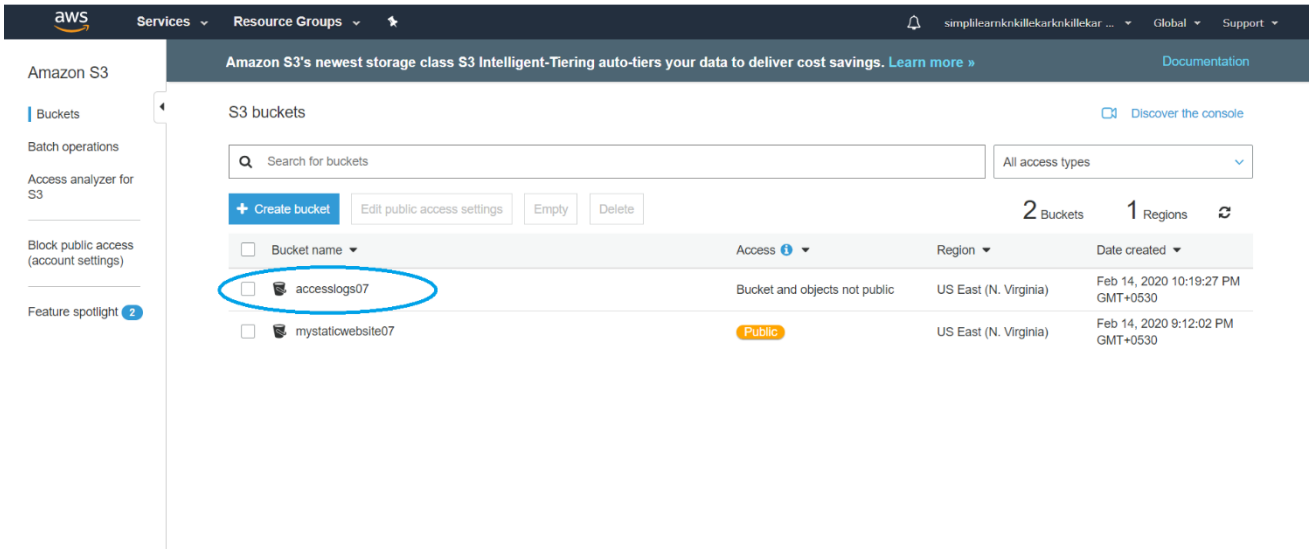
Next, enter the copied Endpoint in the browser as shown below and test whether website is working or no.



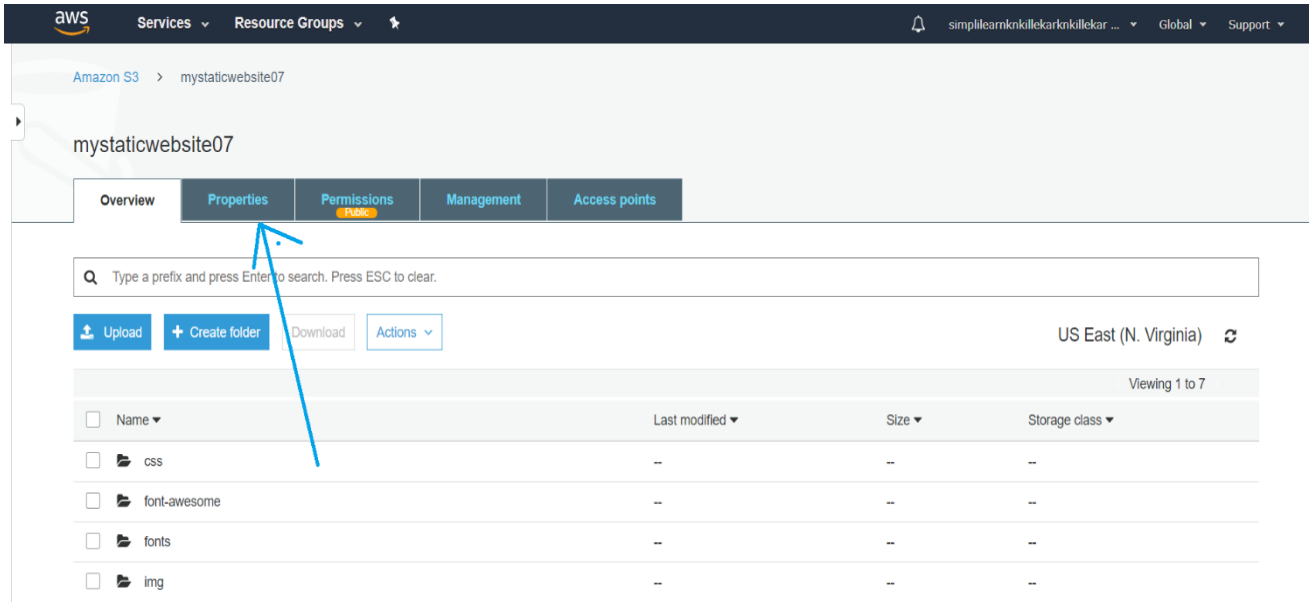
The following window shows that static website is hosted successfully in S3.



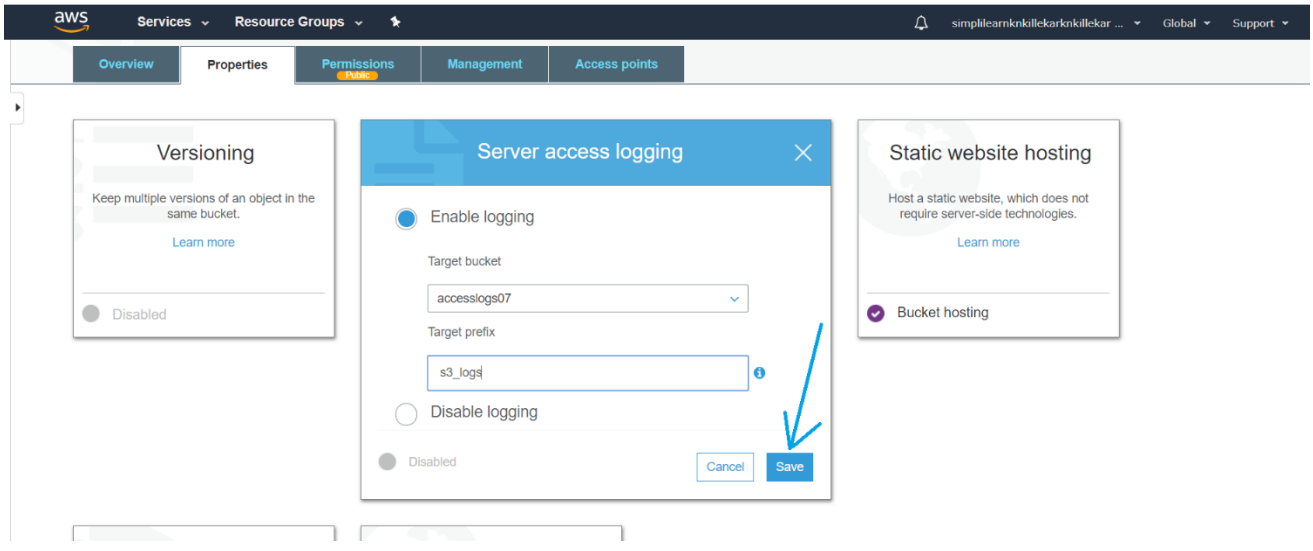
Step 7: Now create one more bucket by the name **"accesslogs07"** in the same **region** to store the server access log files. Repeat the same steps to create the bucket. The "accesslogs07" bucket is created as shown in window below.



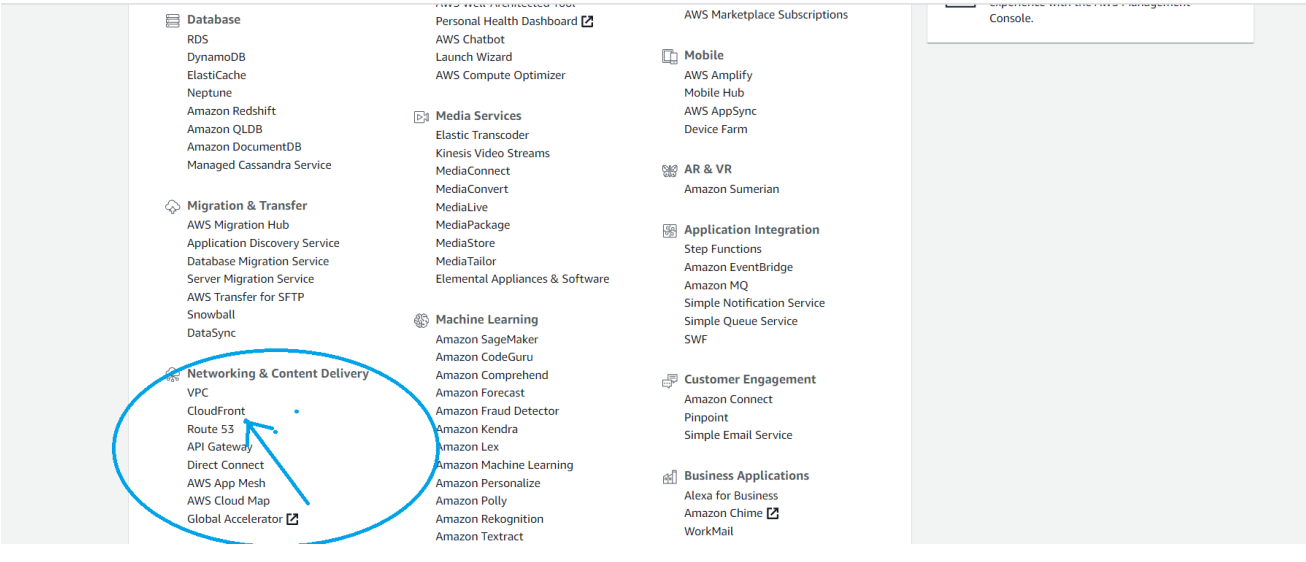
Step 8: Now click on "mystaticwebsite07" bucket and select "Properties" option as shown in window below.



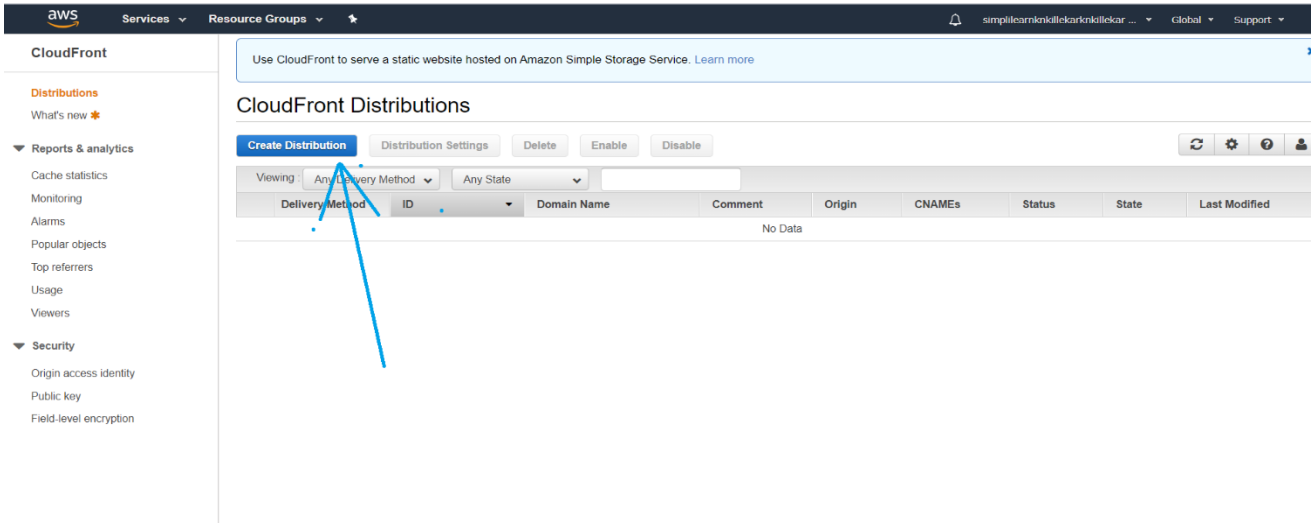
Click on “Properties” option and click on “Server access logging” option and select “Enable Logging” option. Select the target bucket as “accesslogskk” and enter target prefix as “s3_logs shown in window below and click on “Save” option.



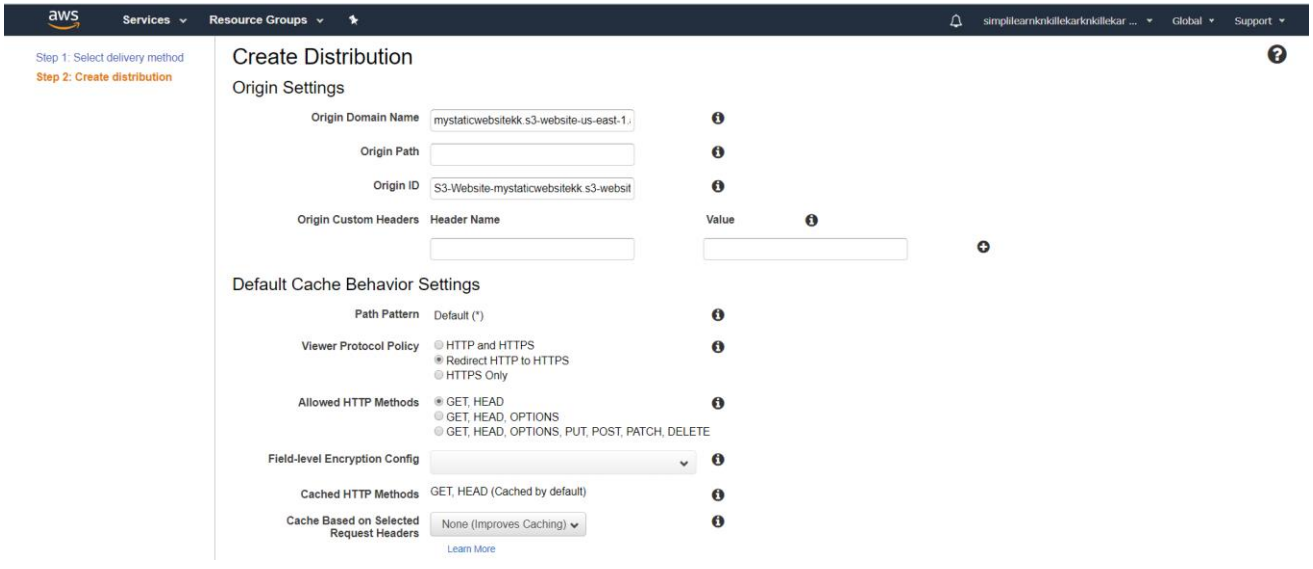
Step 9: Now to minimize the user end latency, I will host the static website using “Cloudfront” service with access logs enabled. To do this, go to AWS management console and select “CloudFront” from **Networking & Content Delivery** section as shown in window below.



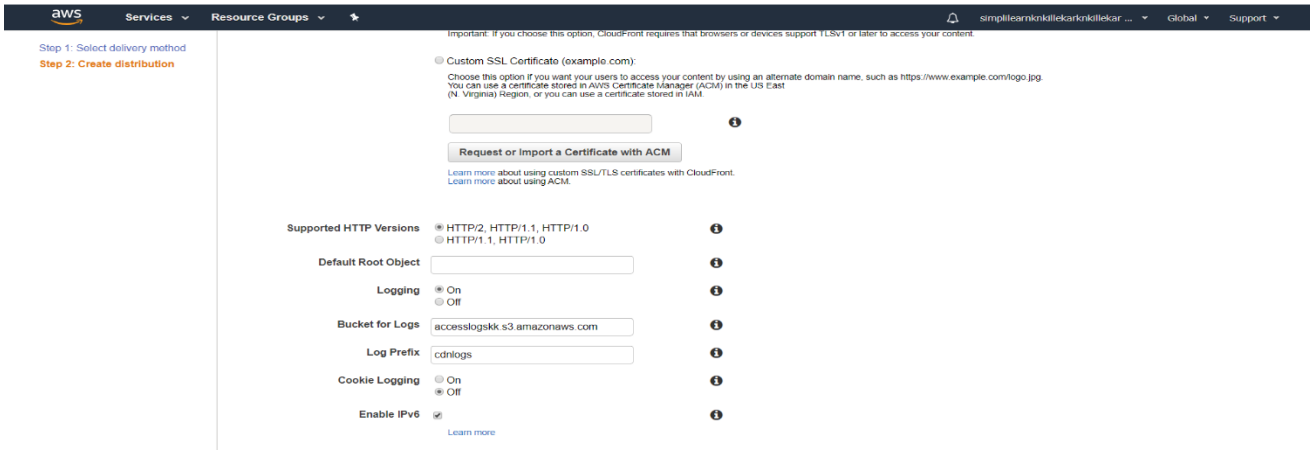
Following window will appear as shown below.



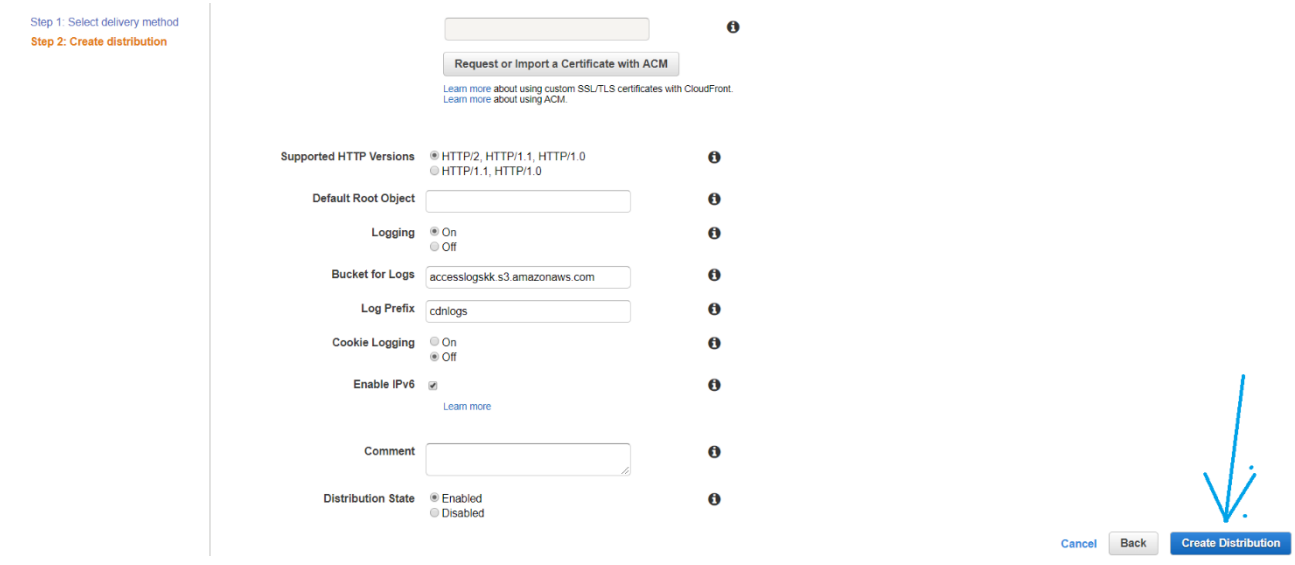
Now click on “Create Distribution” and click “Get started” option in web section. Fill the details as shown in window below.



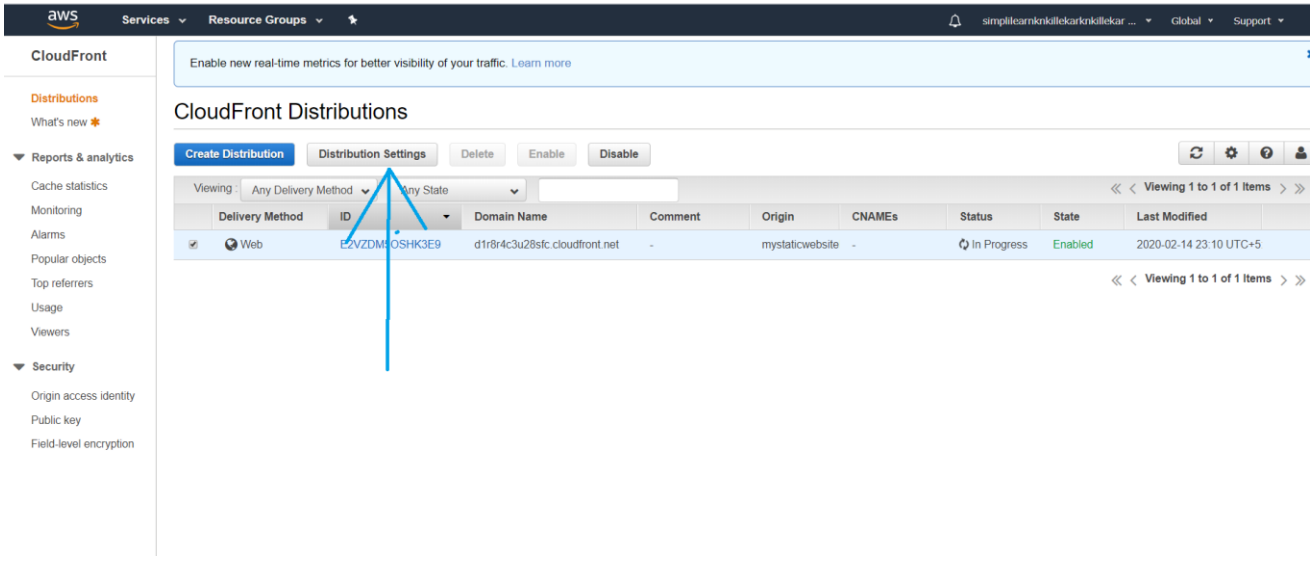
Select “Logging” to **on** and choose bucket for logs as “accesslogskk.s3.amazonaws.com” and enter the log prefix as “cdnlogs as shown in window below.



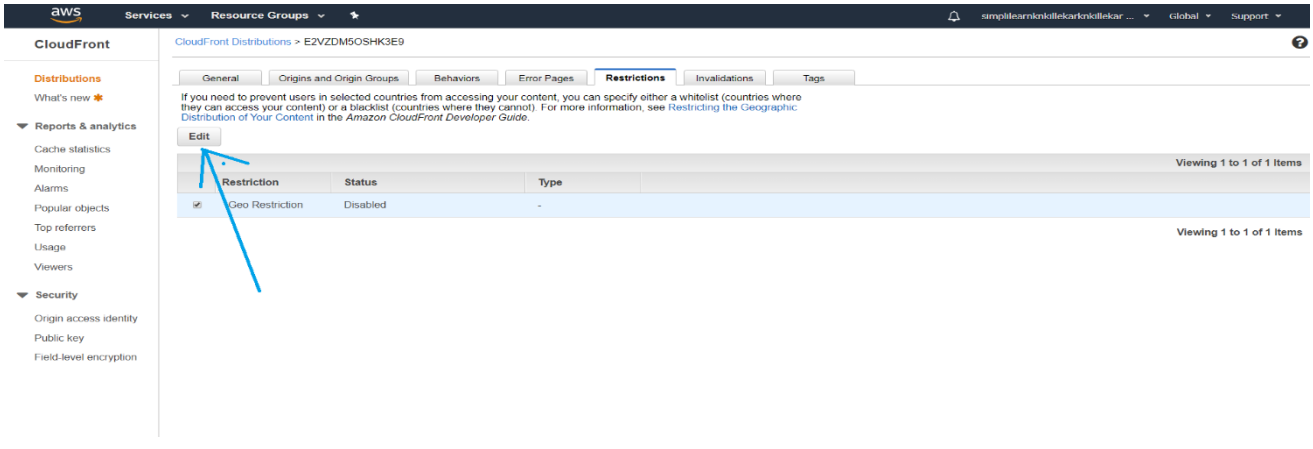
Next click on “Create Distribution” as shown in window below.



Step 10: Now select the created distribution and click on distribution settings as shown in window below.

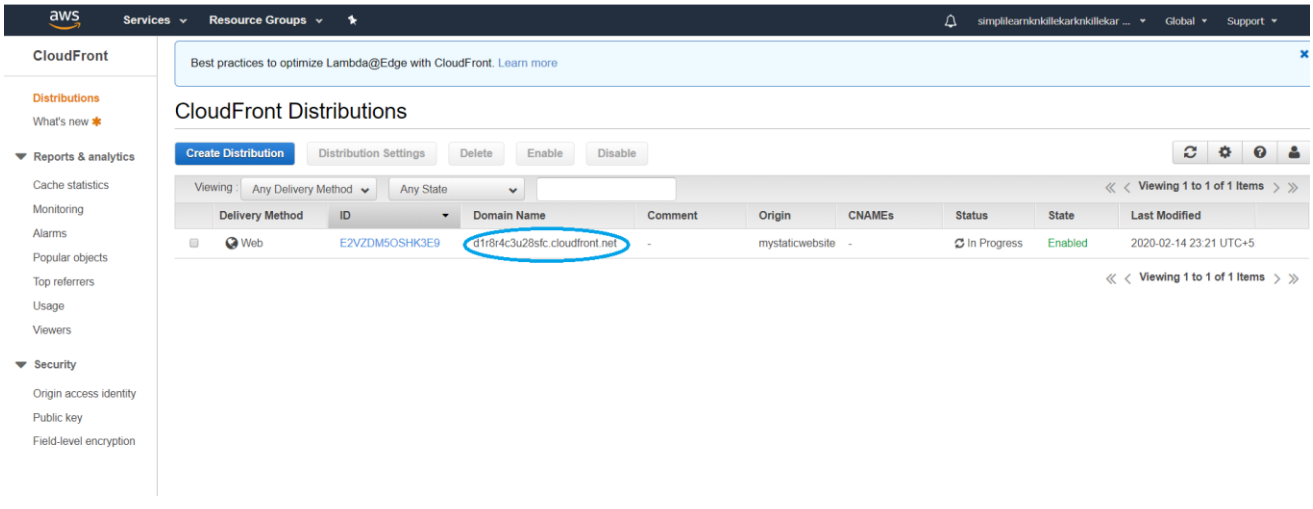


Now go to restrictions tab select “Geo Restriction” and click on edit as shown in window below.

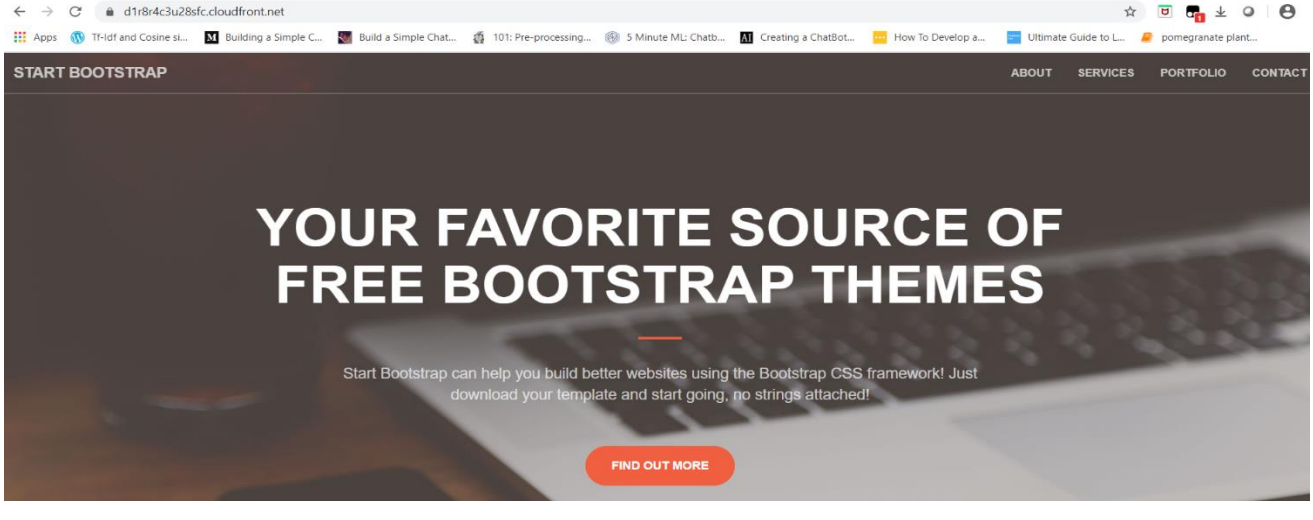


Next enable geo restriction to **yes** and select **blacklist** option. Add Australia and France to blacklist as shown in window below and click on “Yes, edit” option.

Step 11: Now copy the domain name as shown below and enter it in browser to test the website.



The static website is successfully hosted using cloudfront as shown in window below.



Step 12: The access log files are stored in **accesslogskk** bucket in the folder cdnlogs as shown in window below.