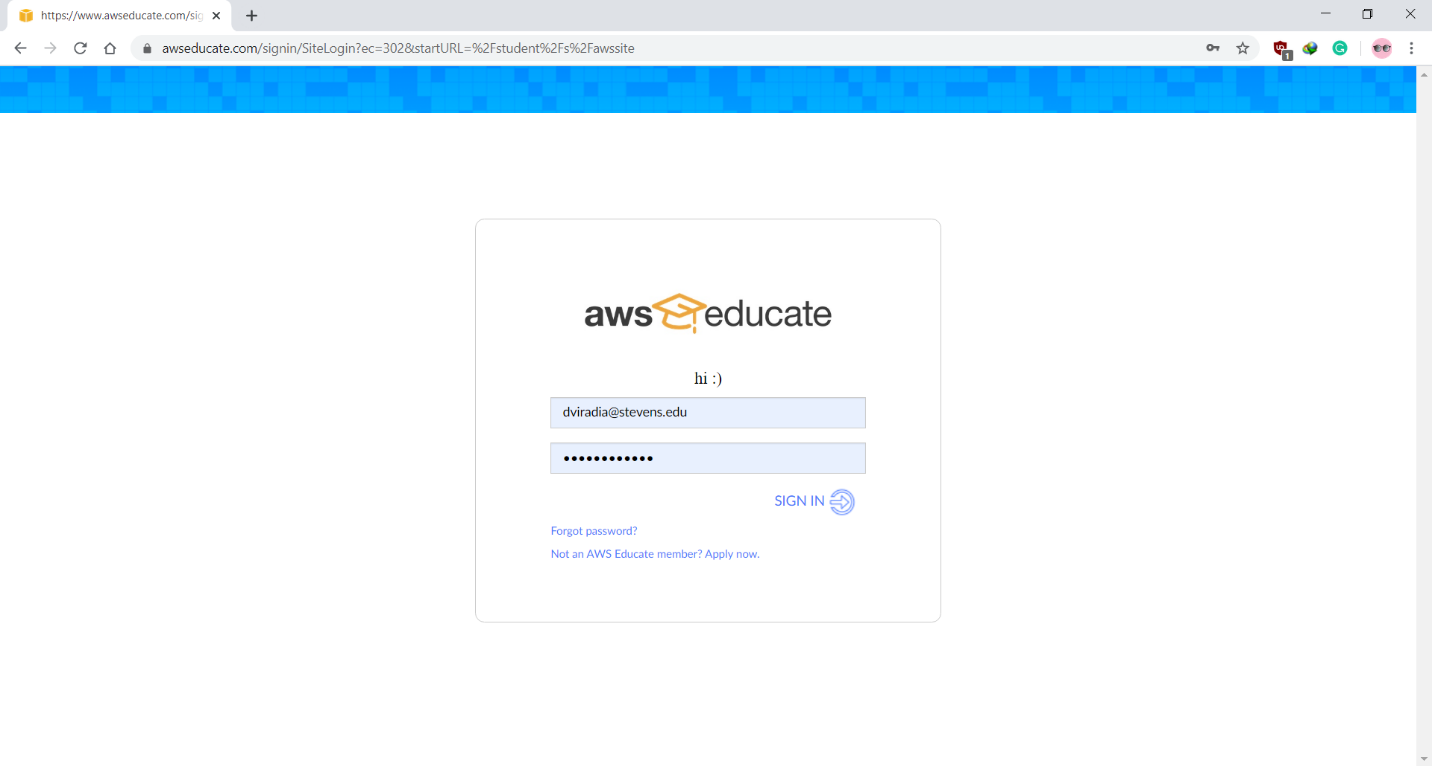
|  |
| --- |
| CS 524 Introduction to Cloud Computing |
| Dharmit Viradia |
| Lab Assignment 4 |
| Prof. Igor Faynberg |

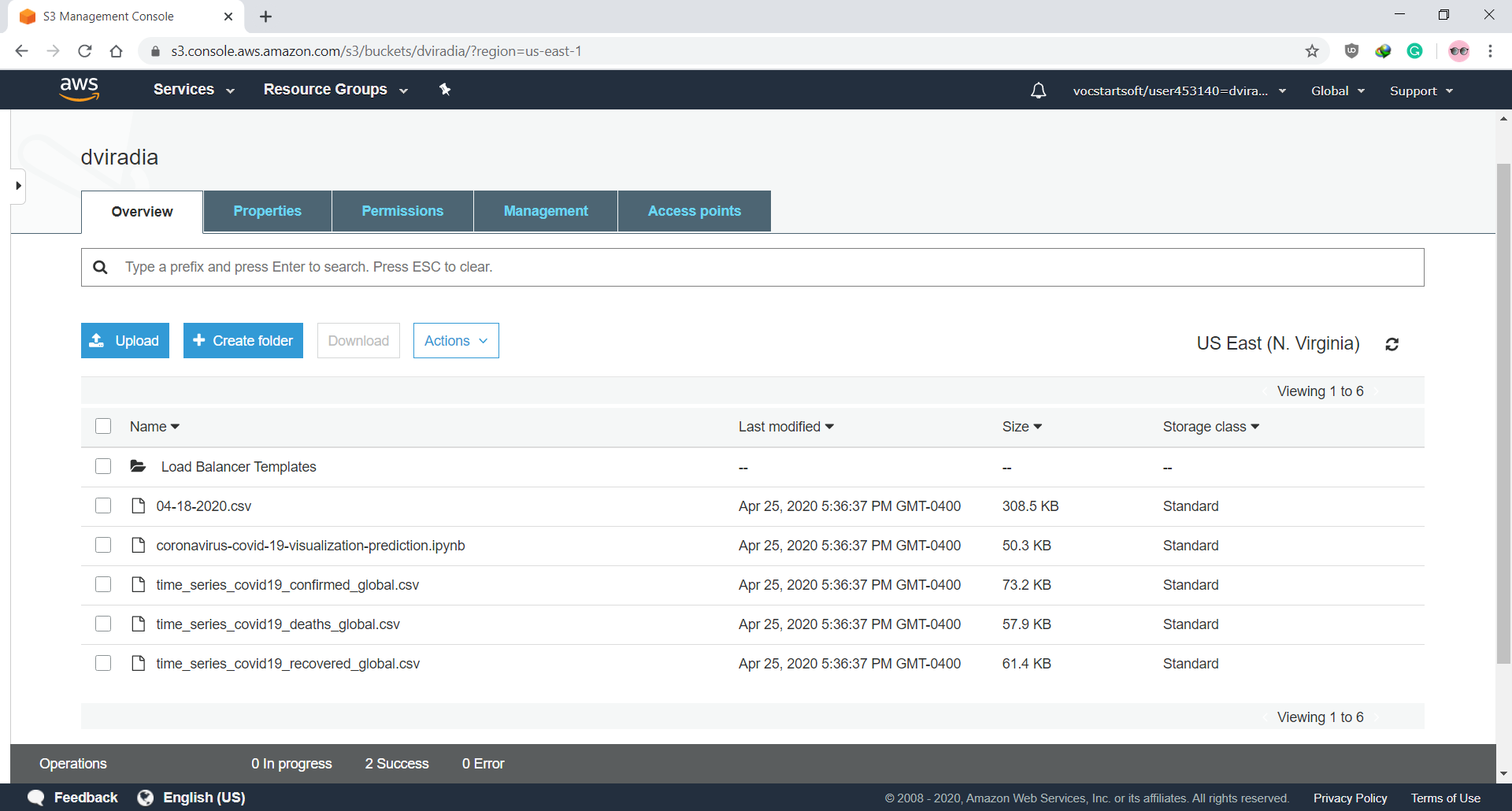
**Step for Creating a CloudFormation**

* First login into your AWS account

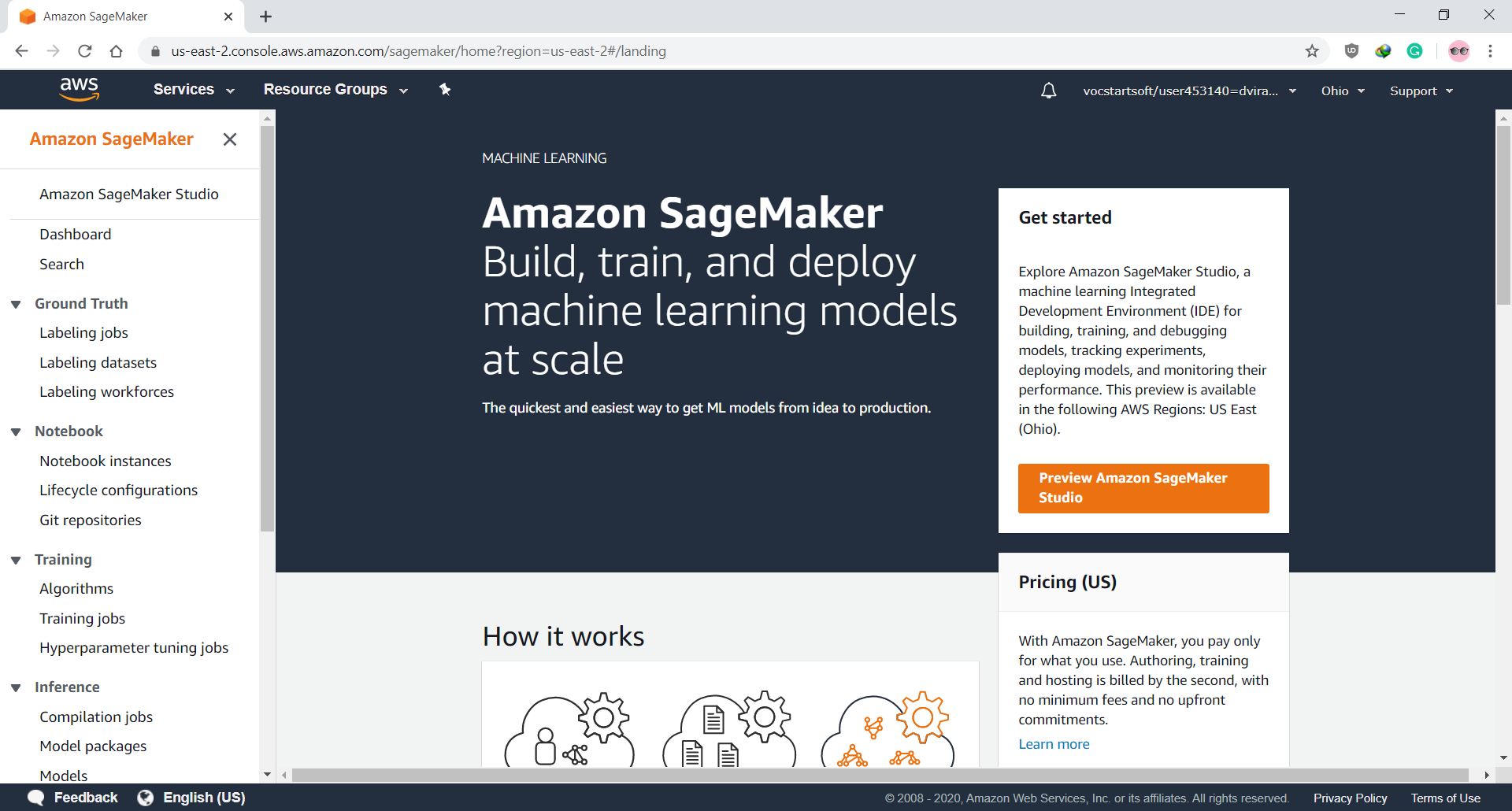


* Upload Data Files to S3 Bucket and give Public Access

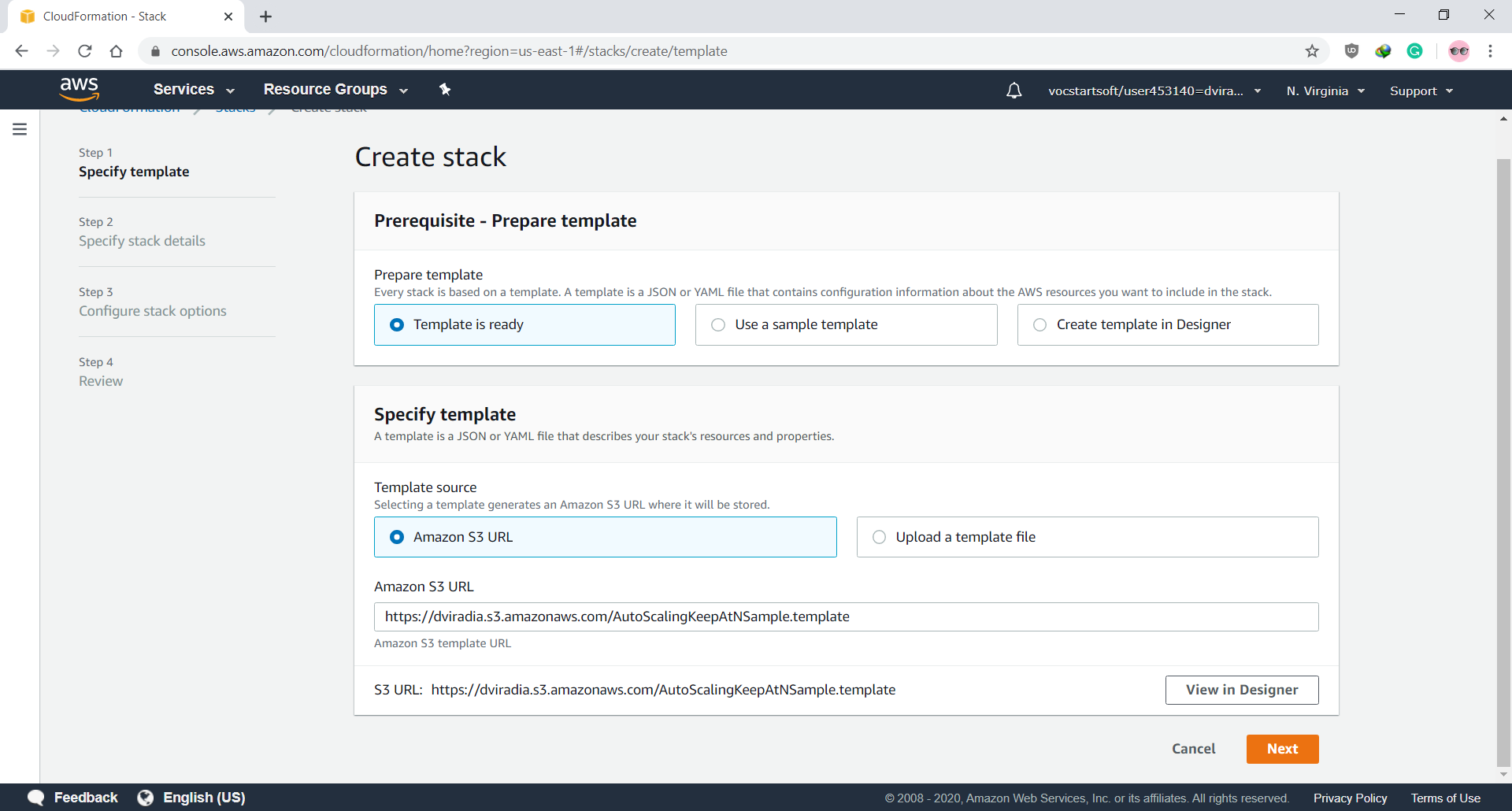
I have used already created bucket from previous Lab



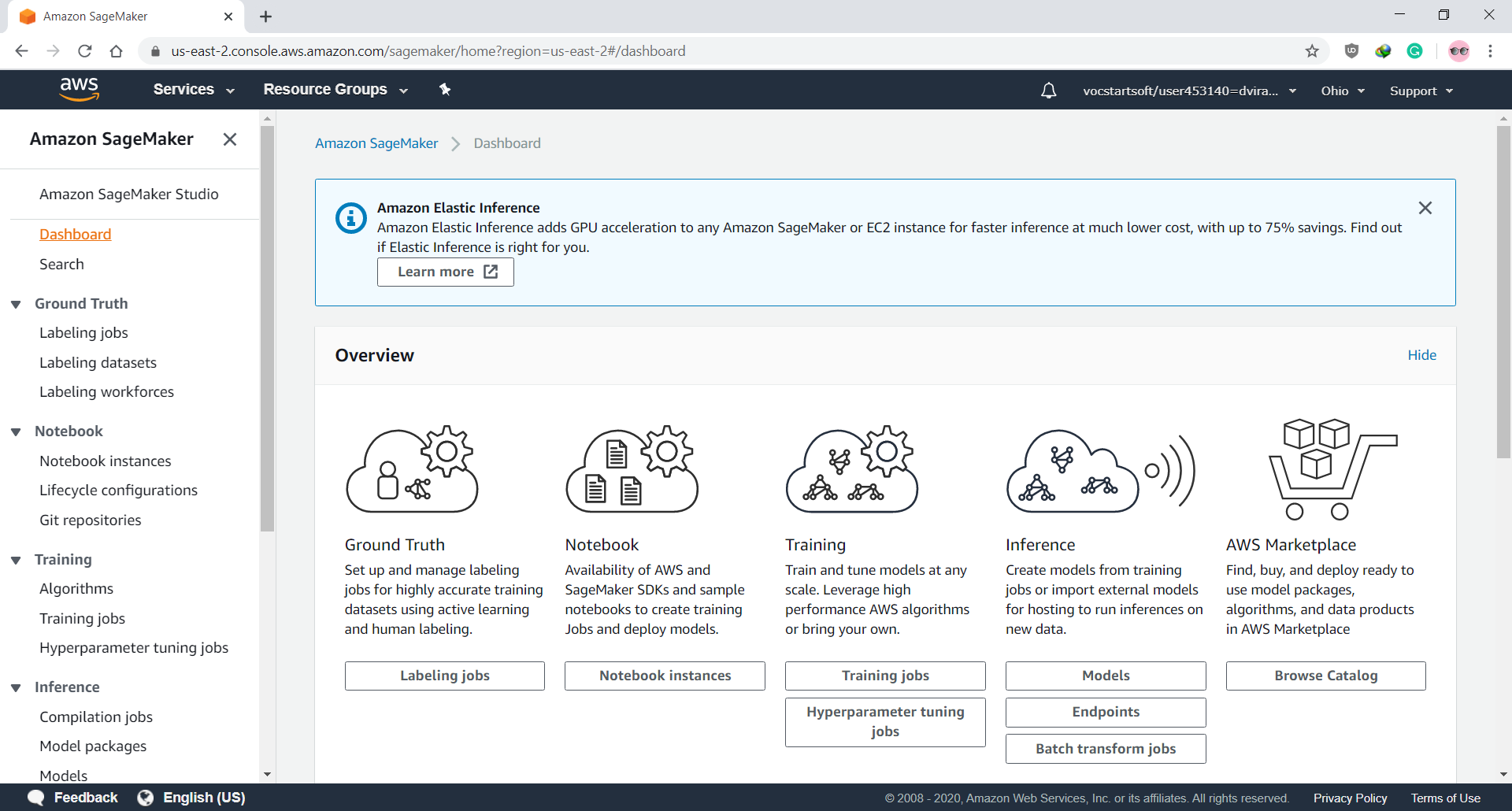
* On AWS Dashboard go to Amazon SageMaker Services



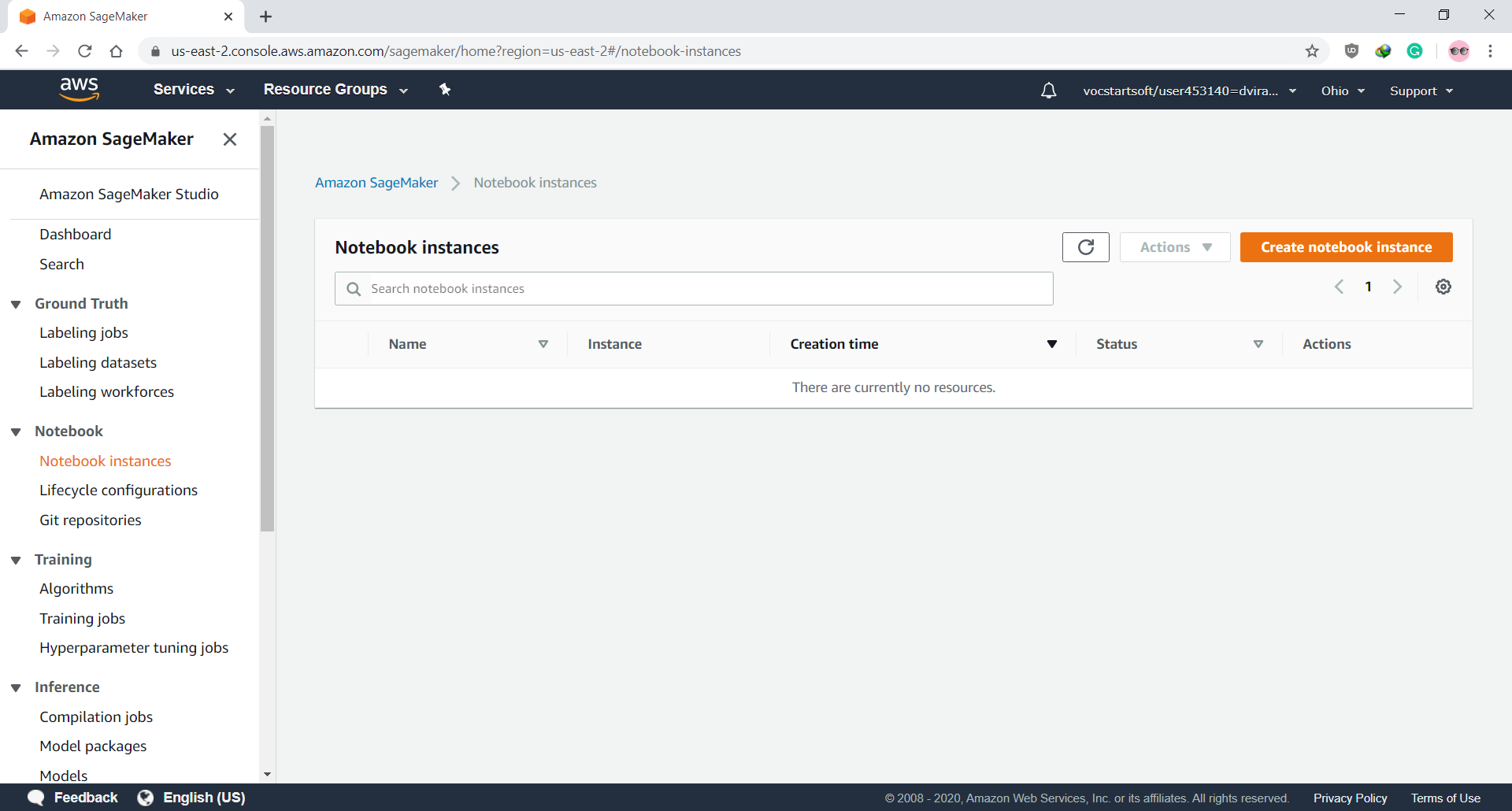
* Now, Select Dashboard on left side menu



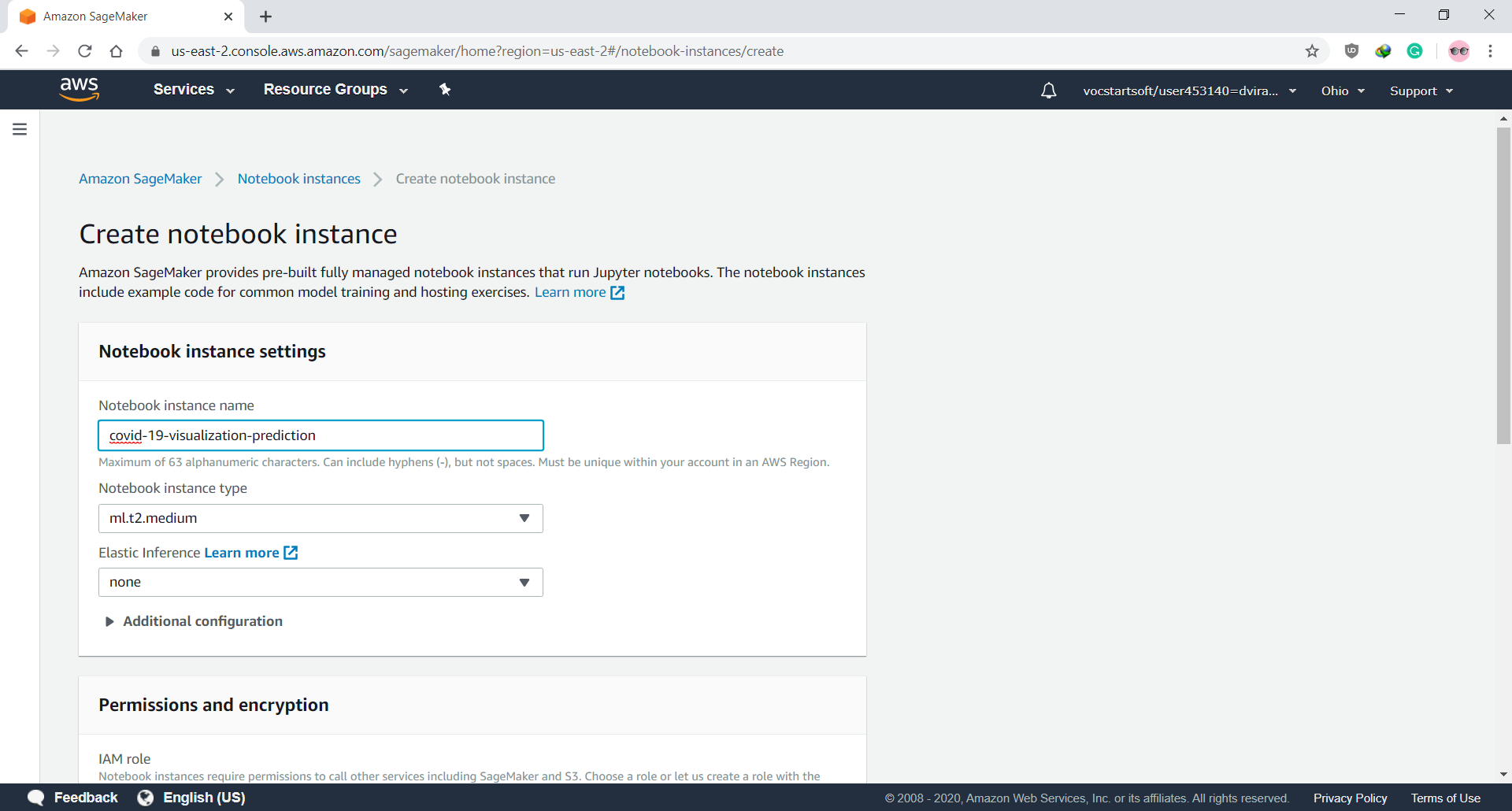
* On Dashboard Select Notebook Instance



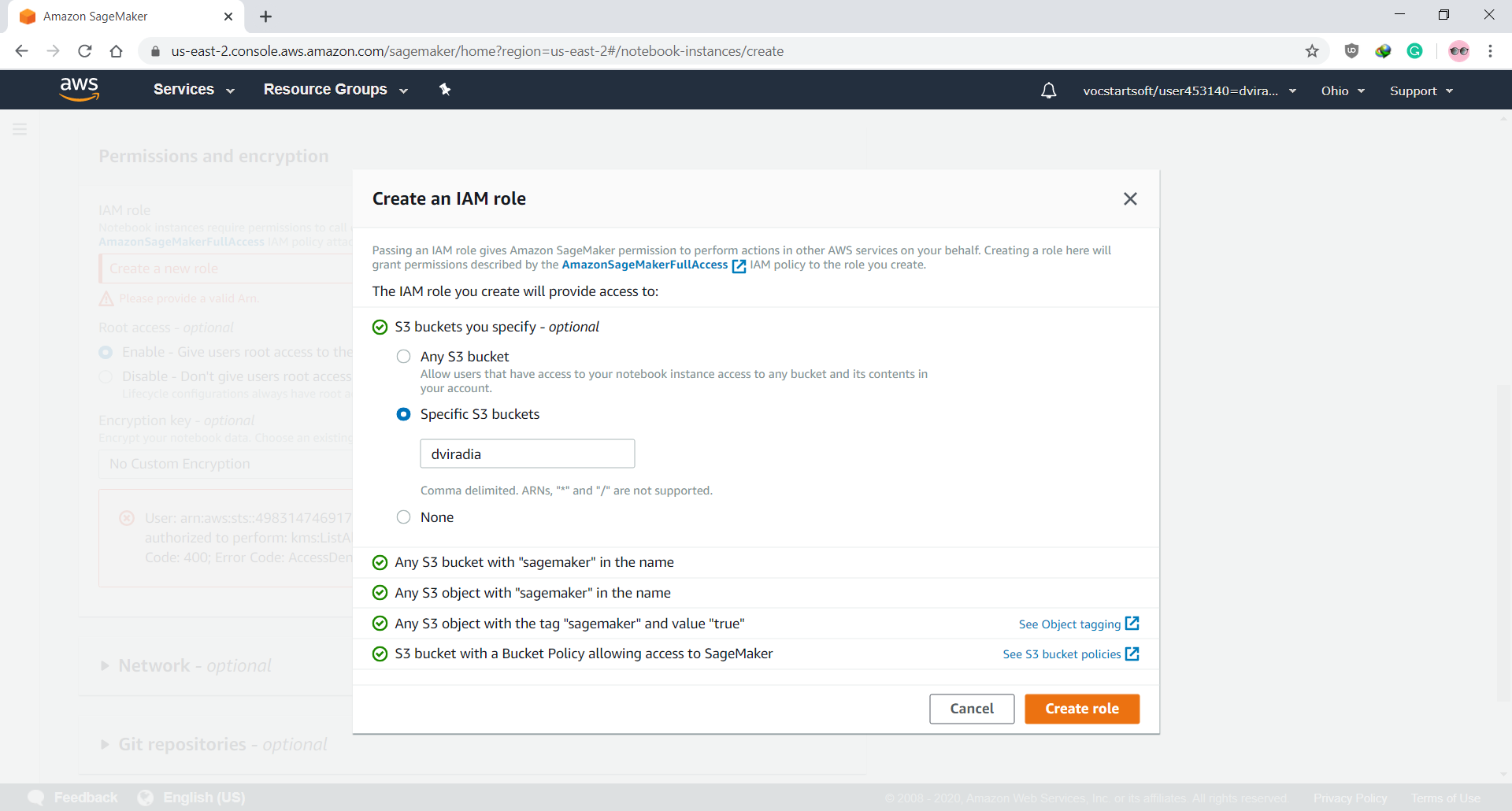
* Now Create notebook instance



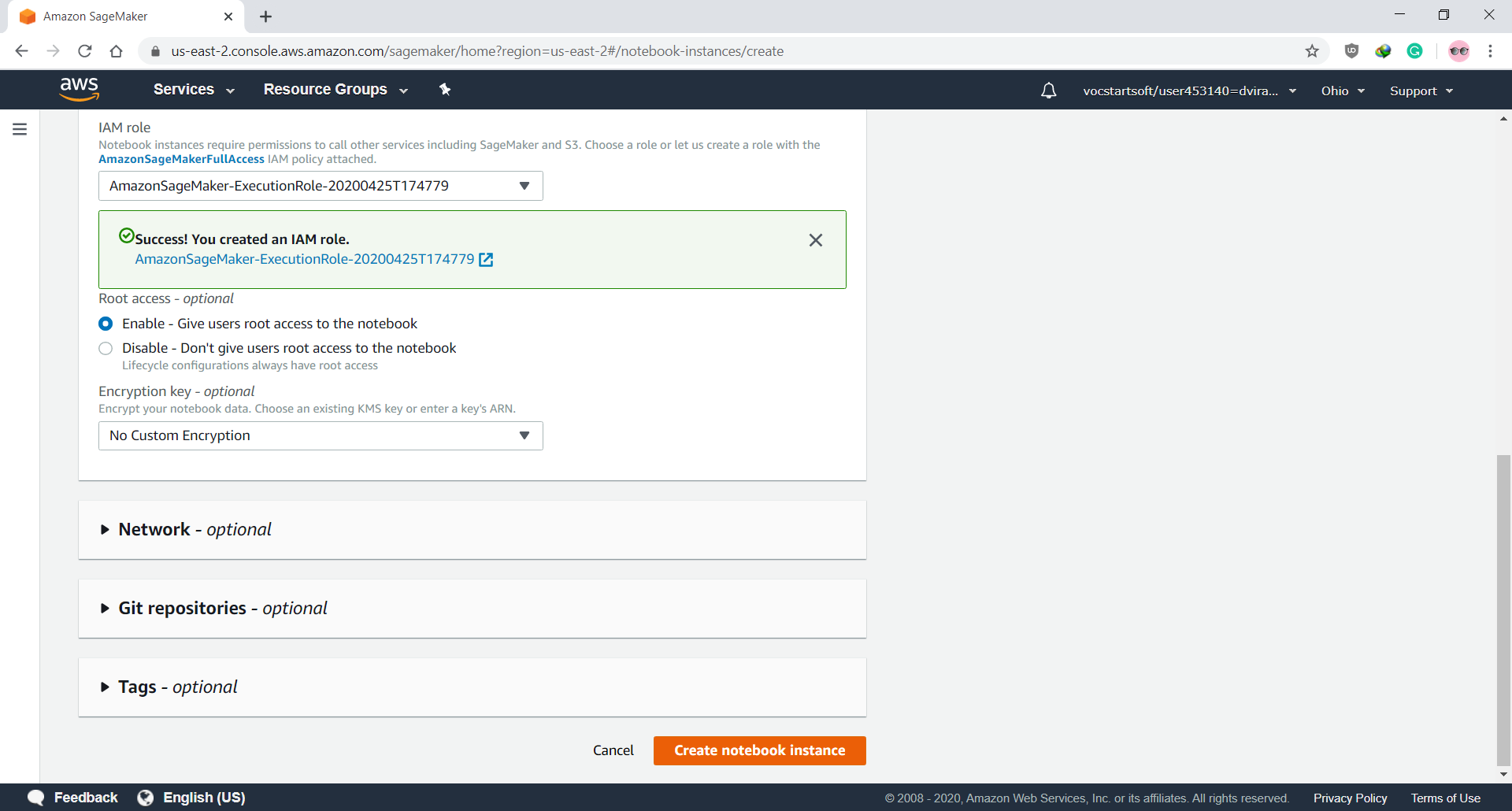
* Give Notebook Instance Name and select Instance type as ml.t2.medium



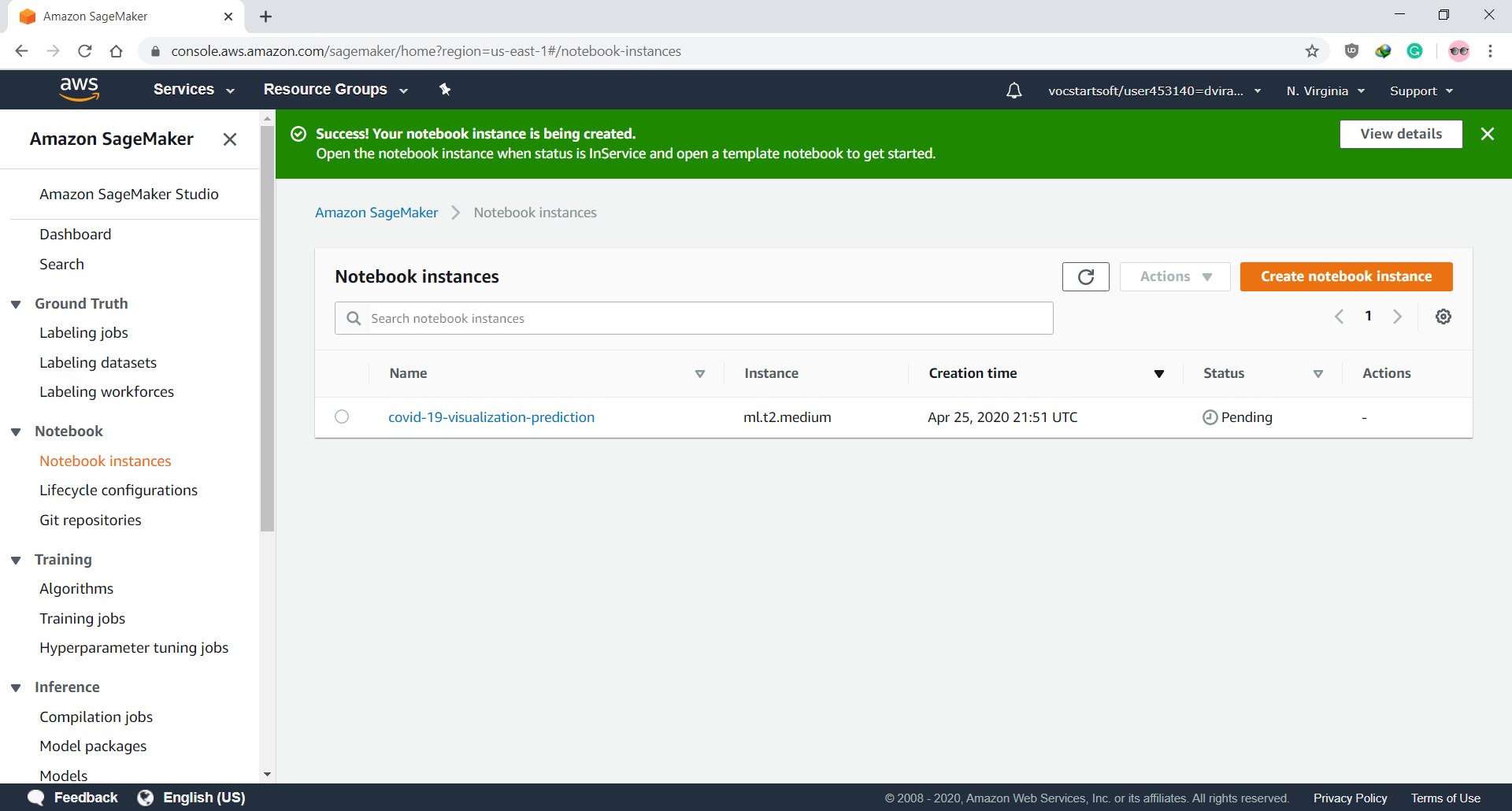
* Create new IAM Role and give access to your bucket



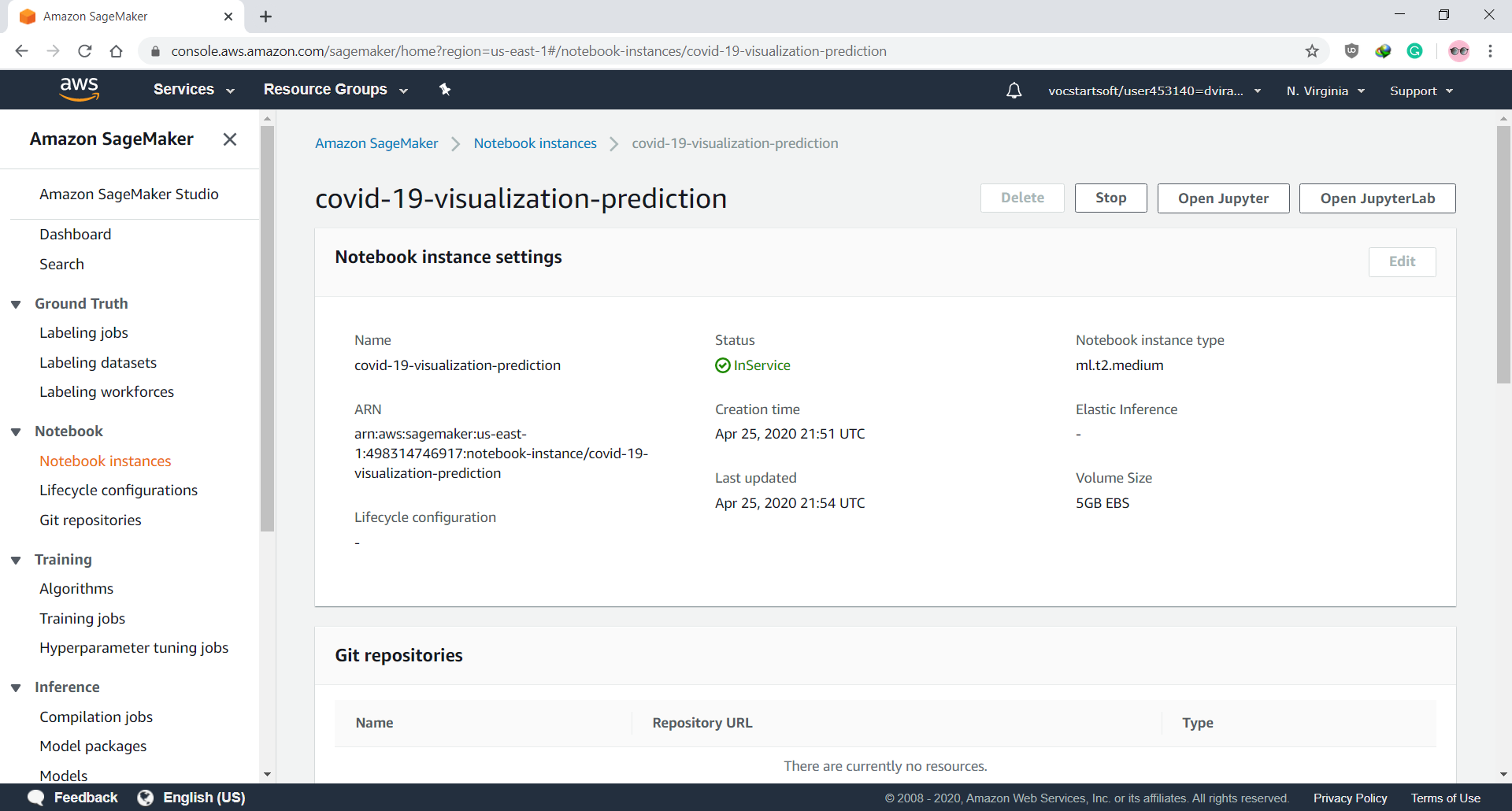
* After Creating new IAM Role, leave other setting as default and Create notebook instances



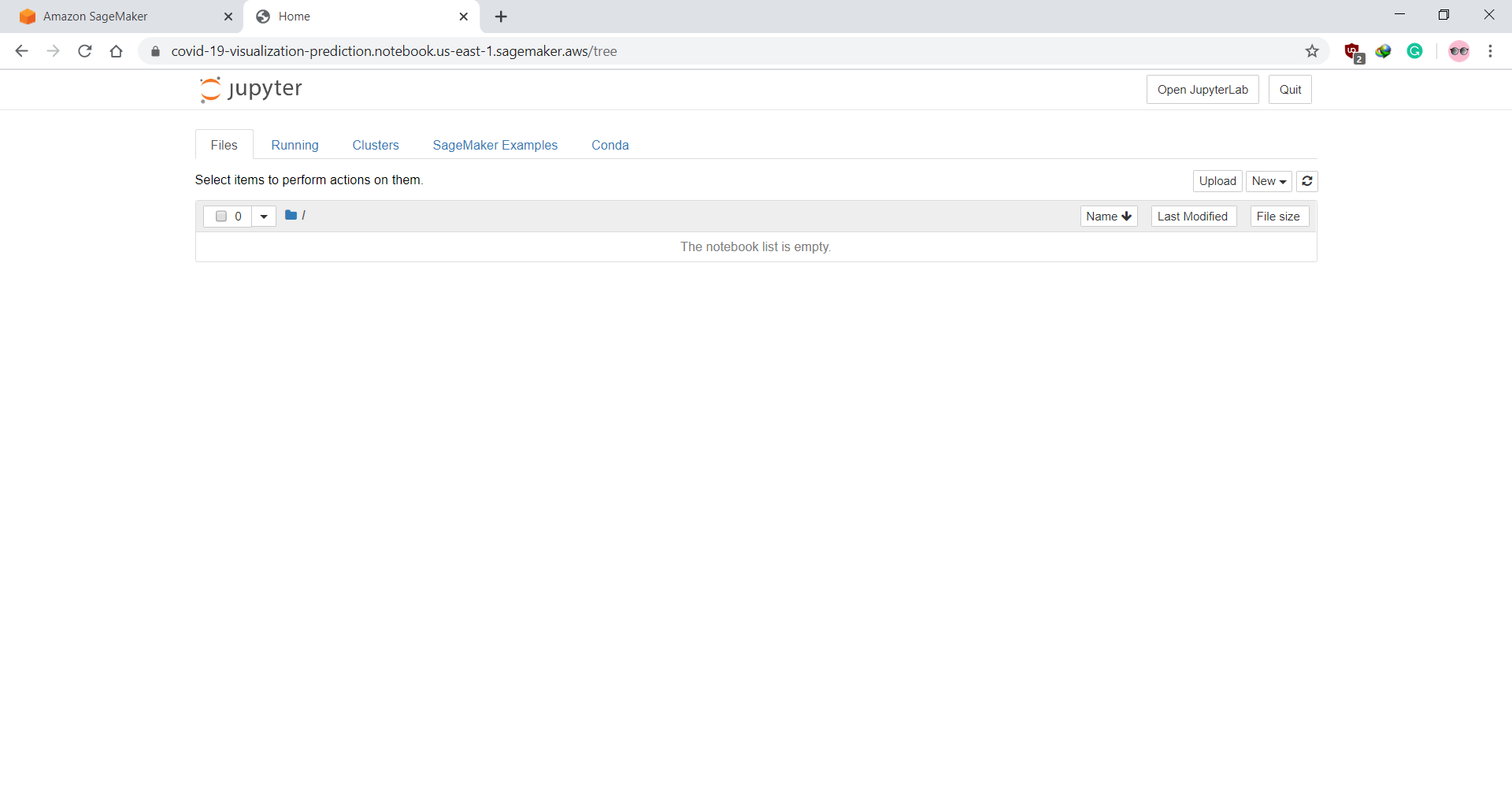
* Notebook Instance is created successfully



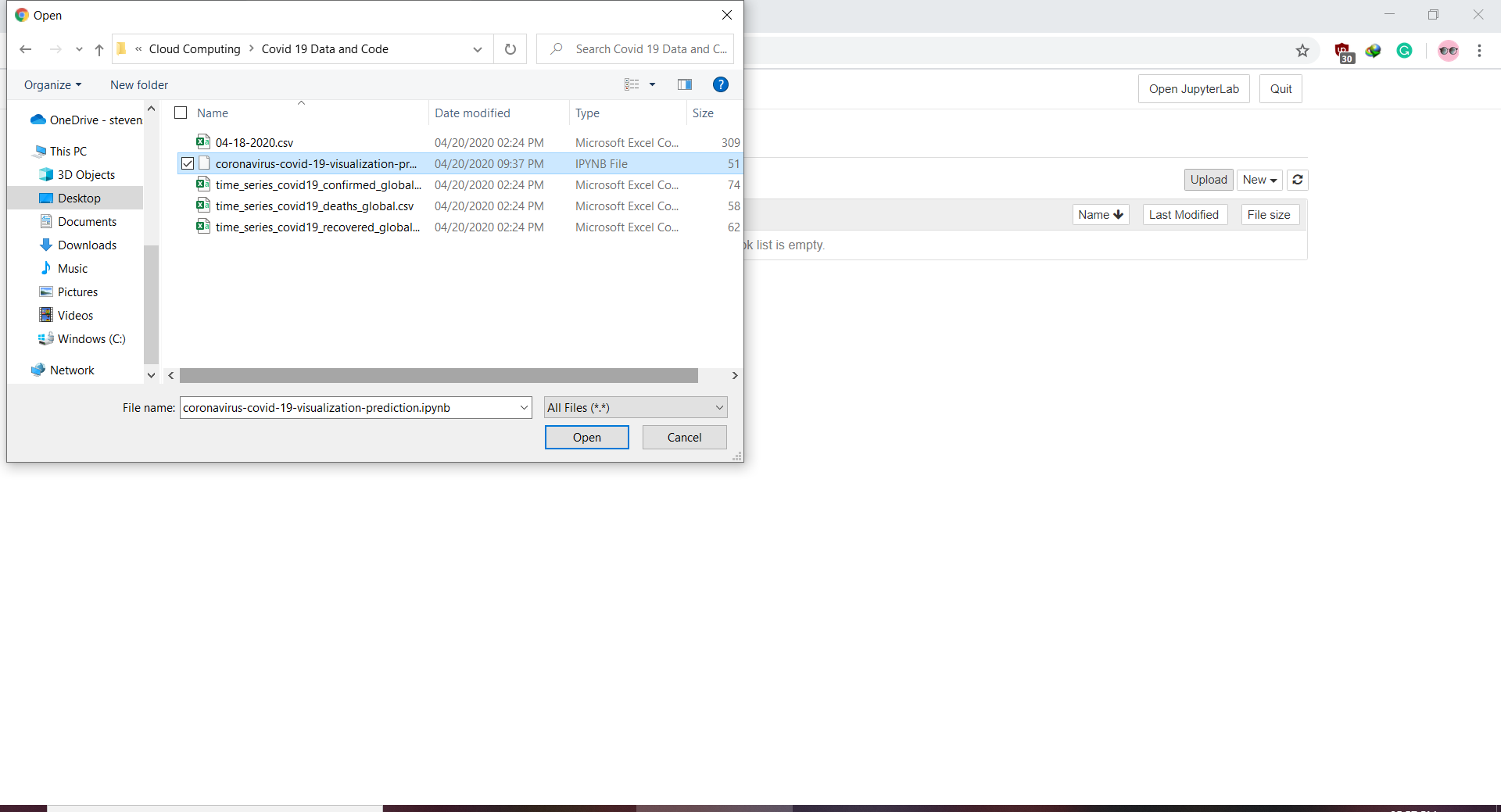
* After Status of Notebook changes to InService, Open Jupyter Notebook

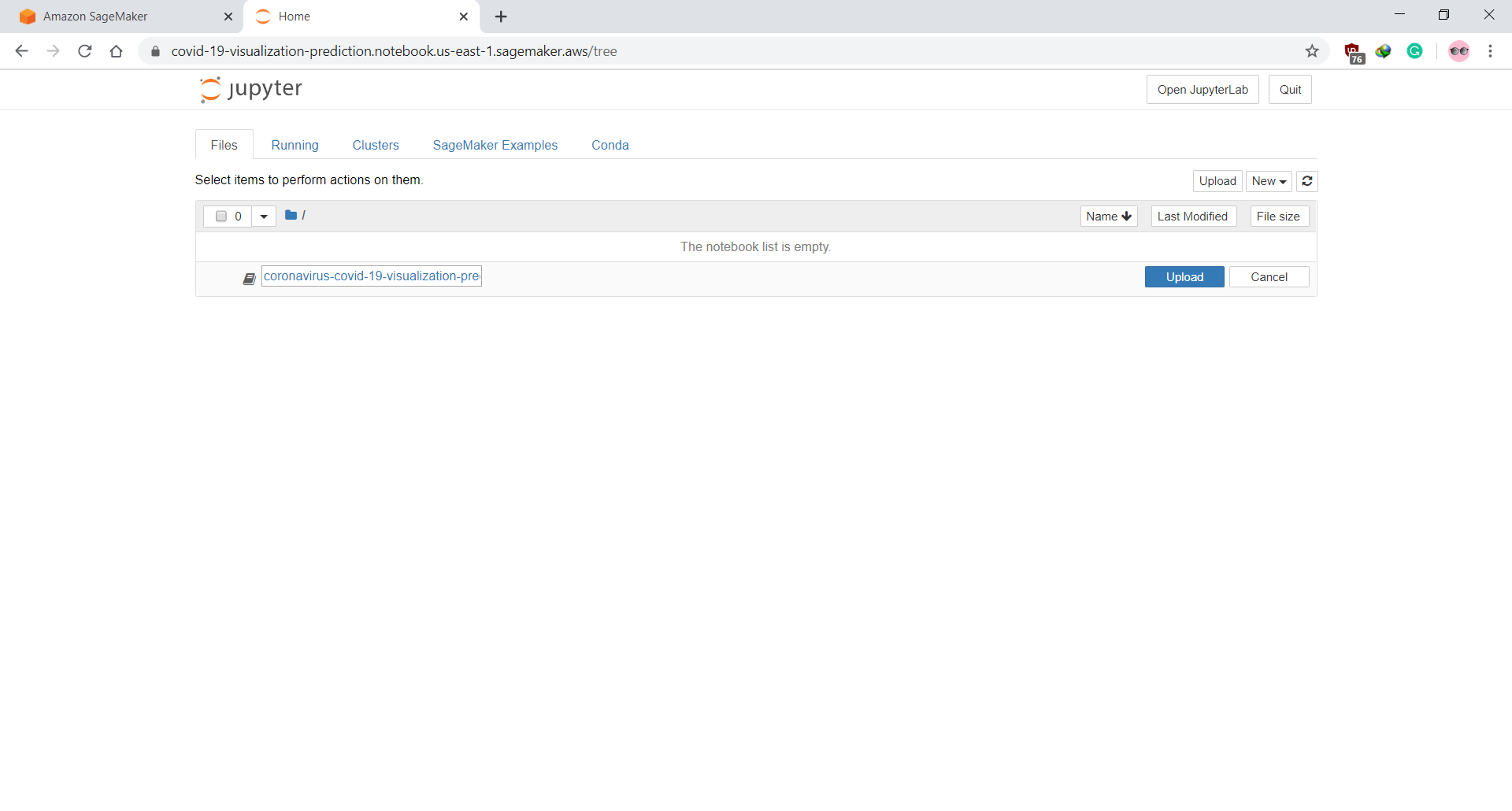


* After Opening Jupyter Notebook Upload the Code File

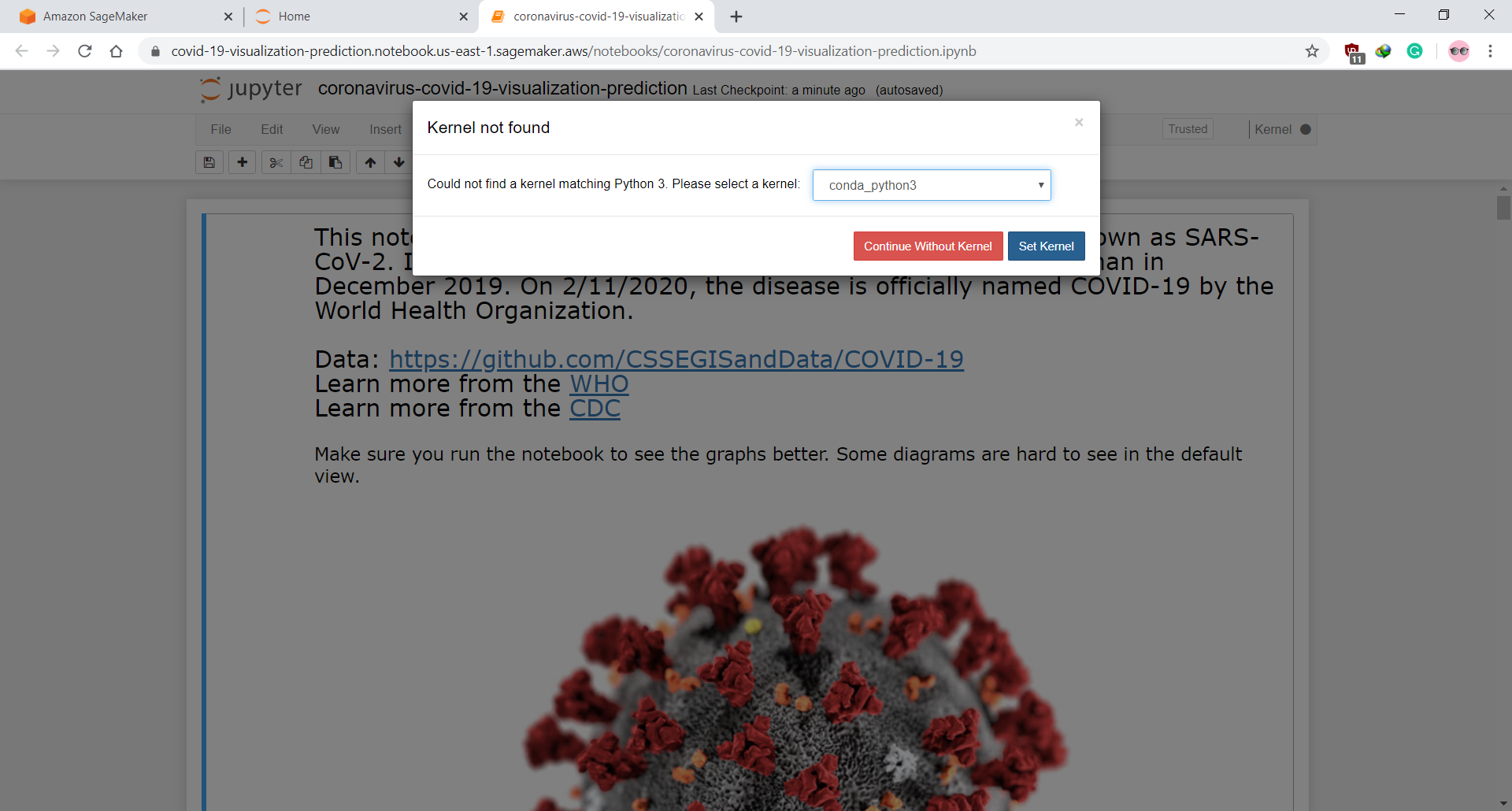


* Select the code file from Local Directory and Upload the File

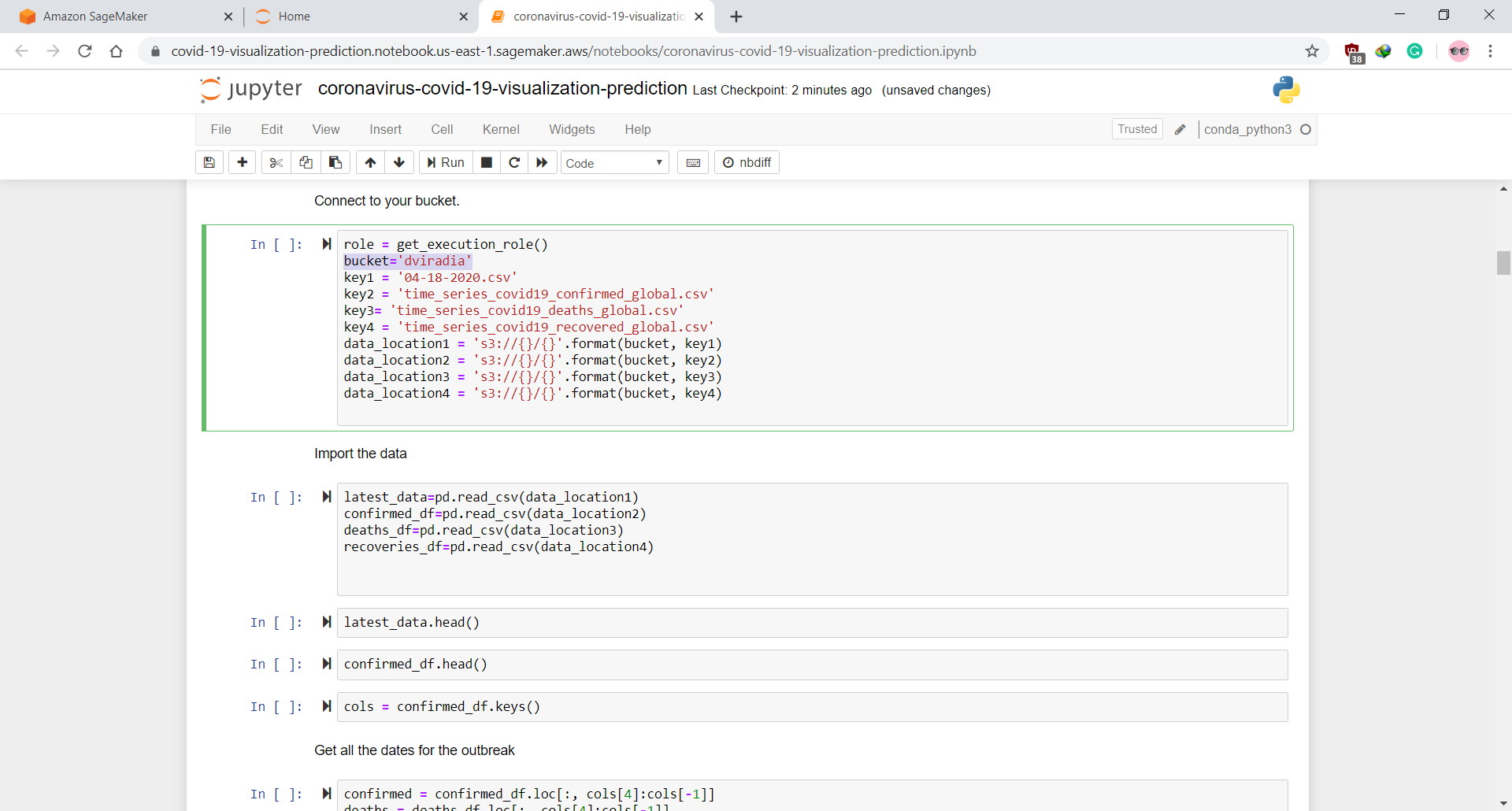




* Open the Code File, it would open in Jupyter Notebook and set Kernel to conda\_python3



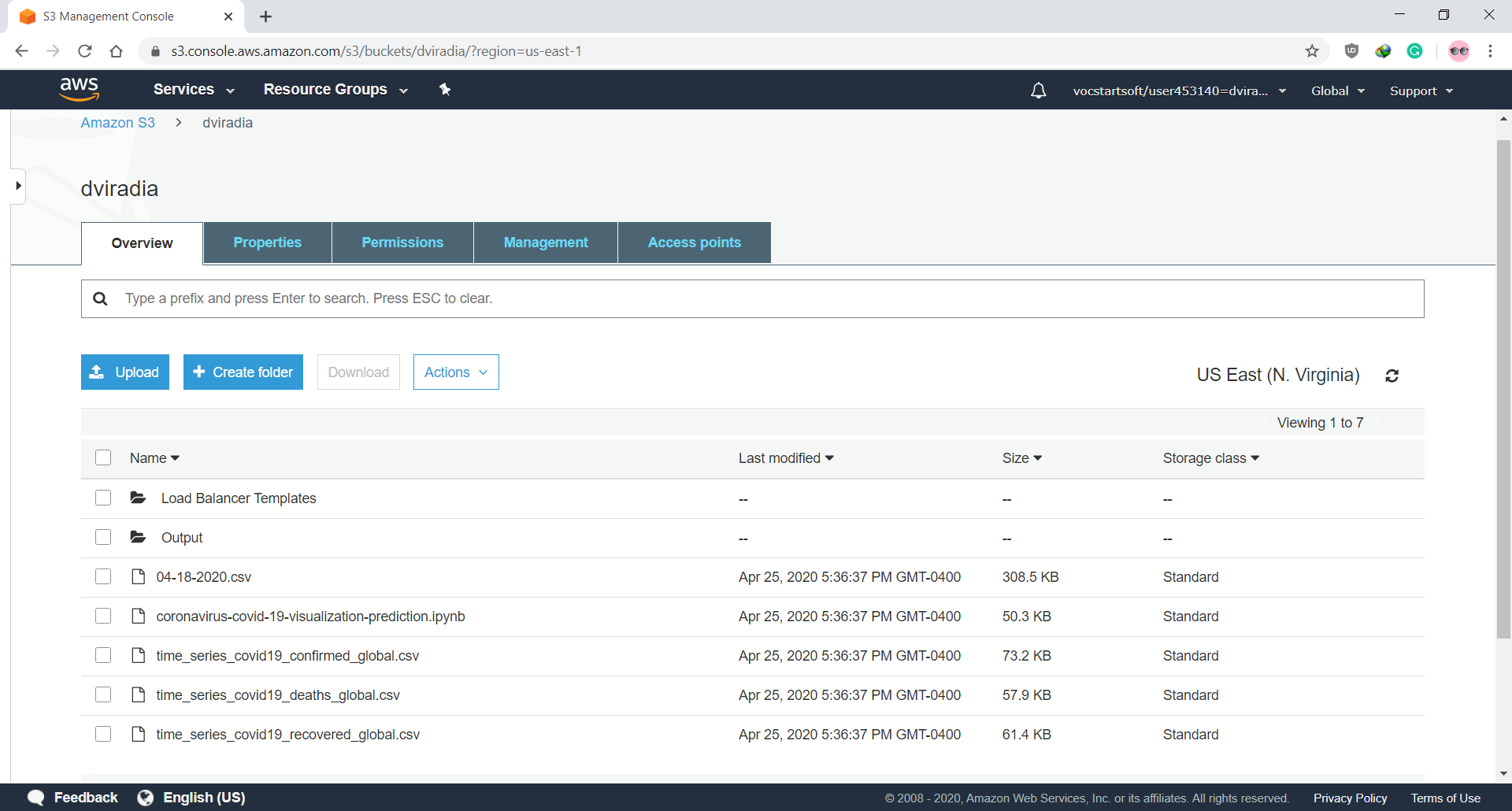
* Replace “<bucket>” with your S3 bucket name

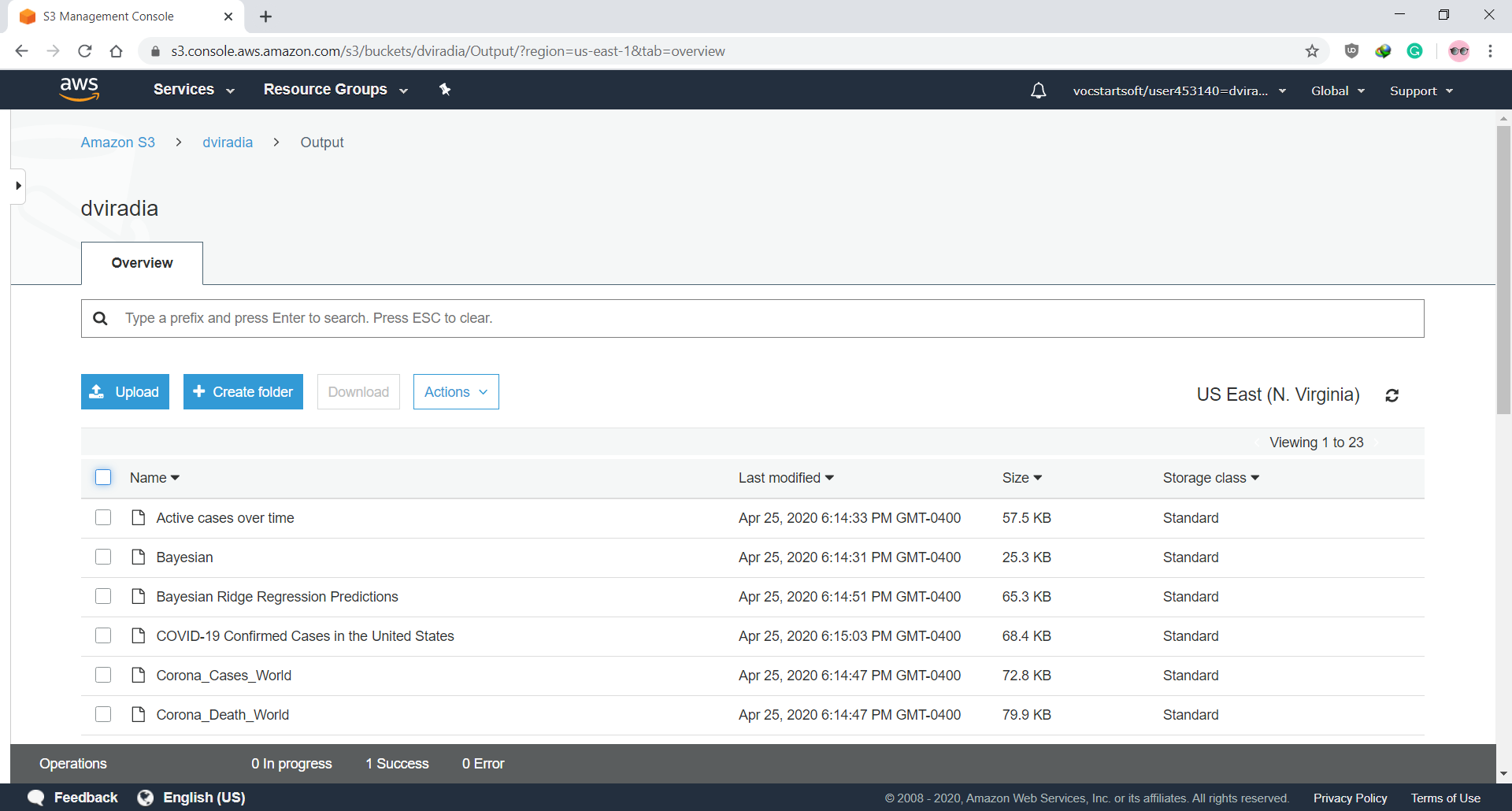


* Run the code on each cells of the notebook

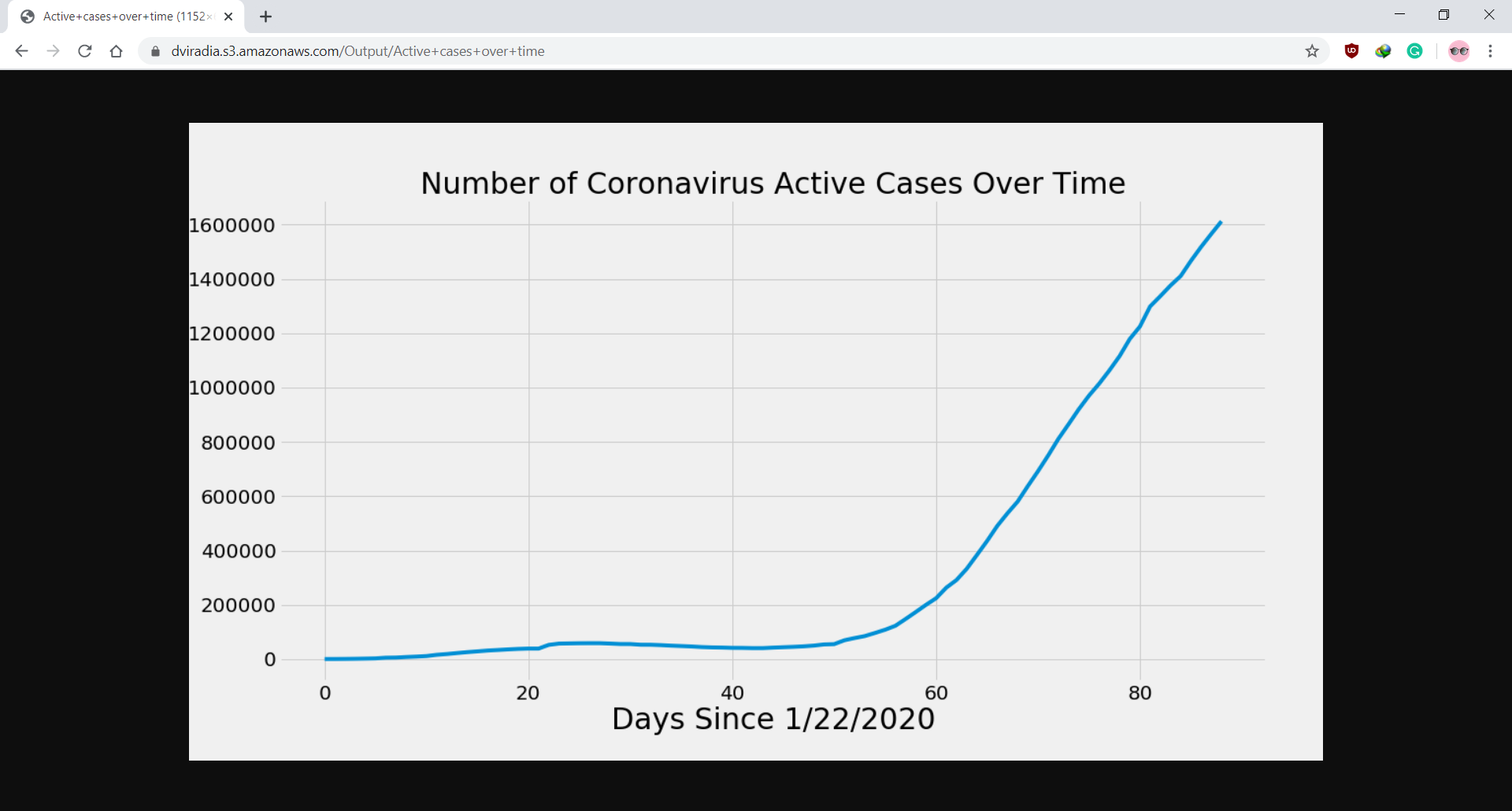


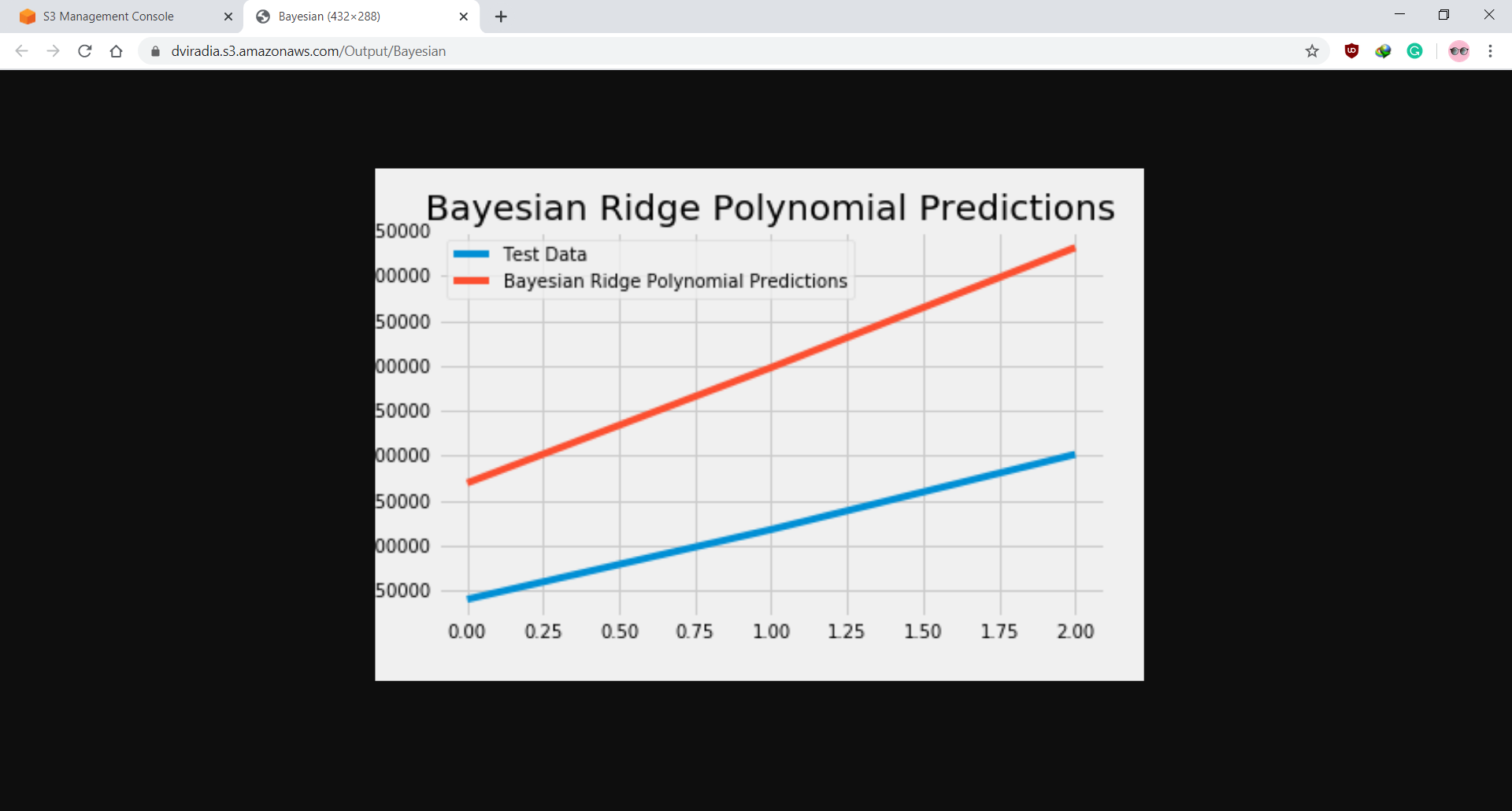
* Outputs Generated are stored in Output Folder in S3 bucket



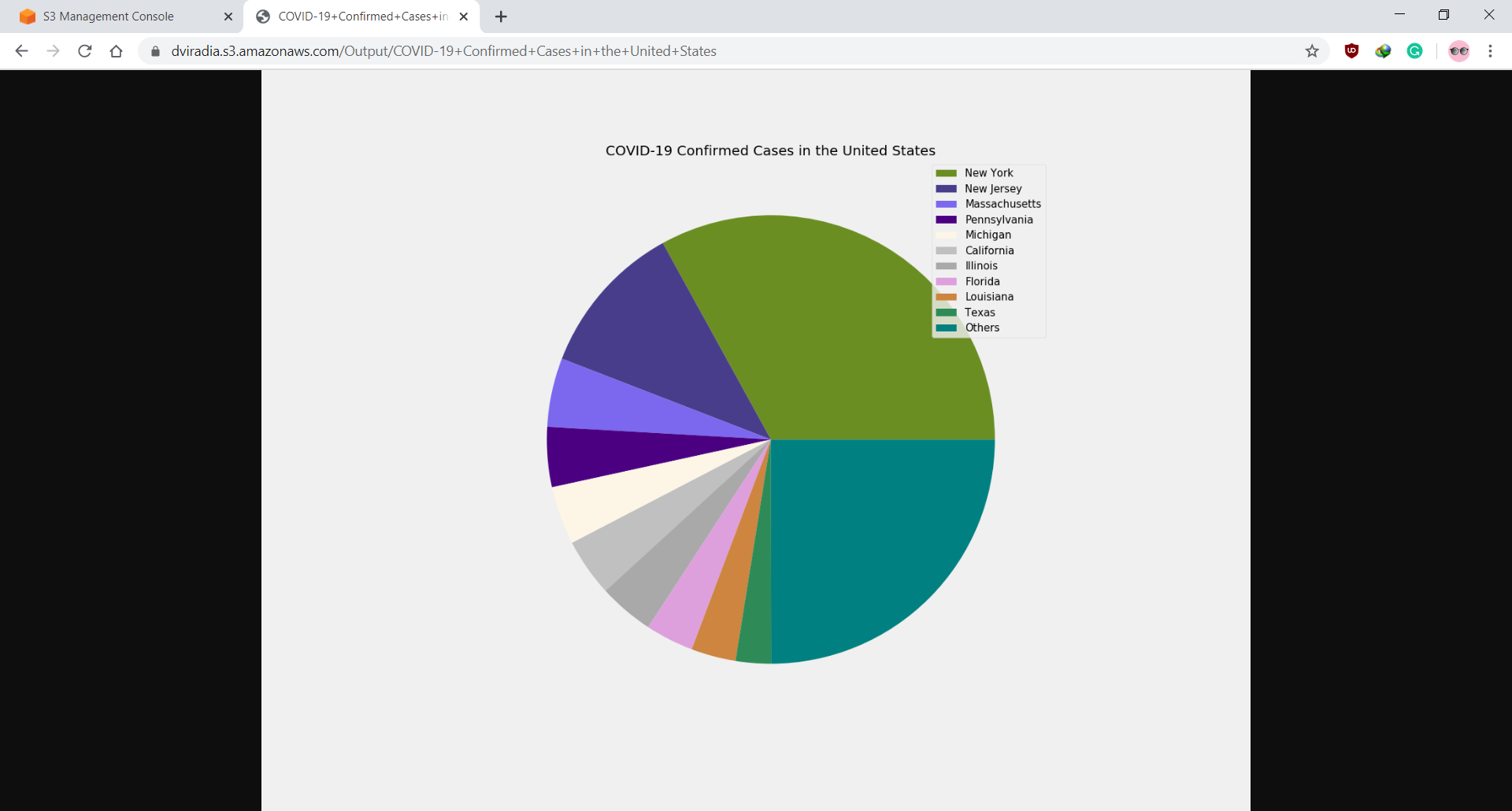


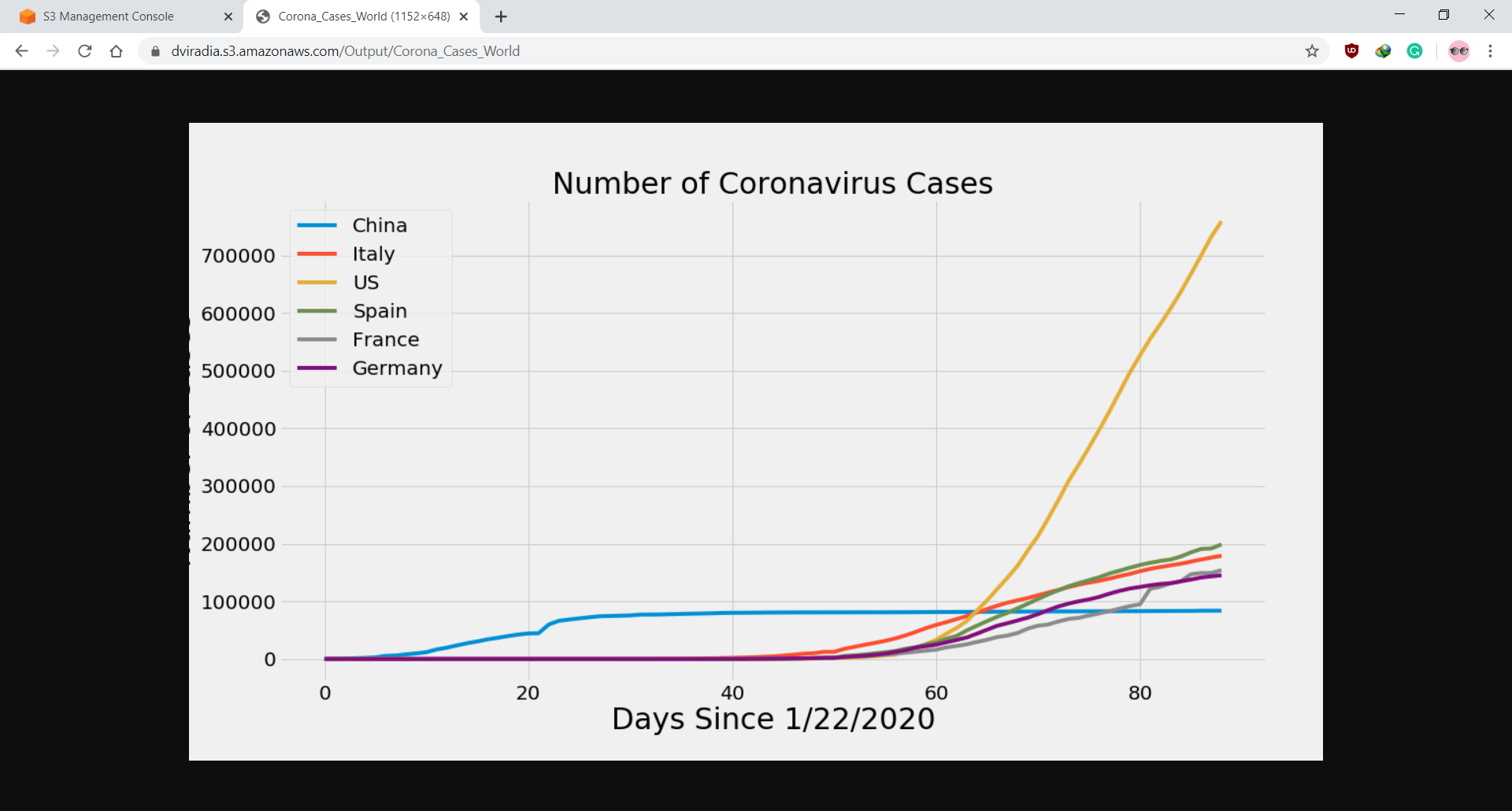
* Output Graphs

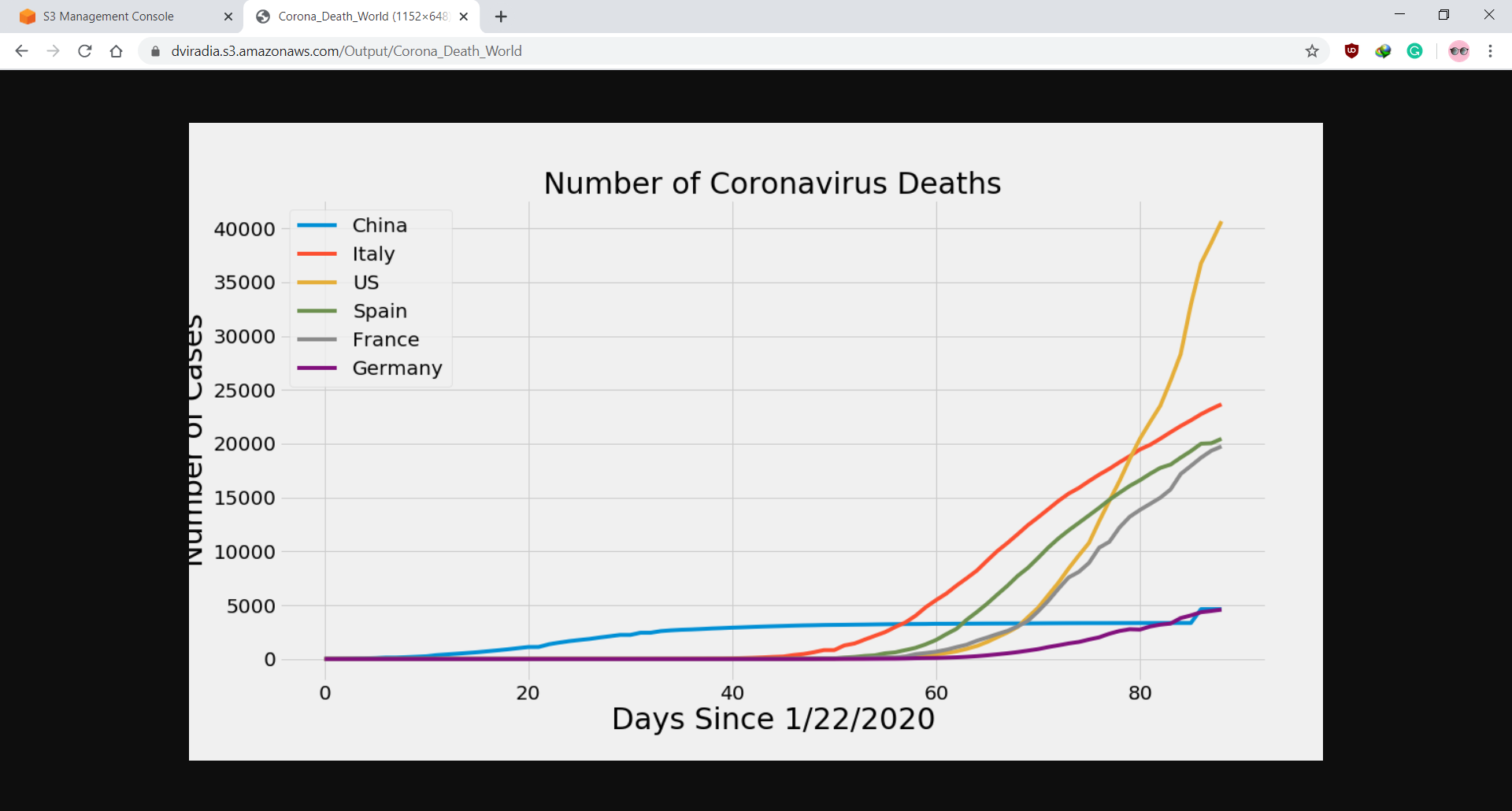


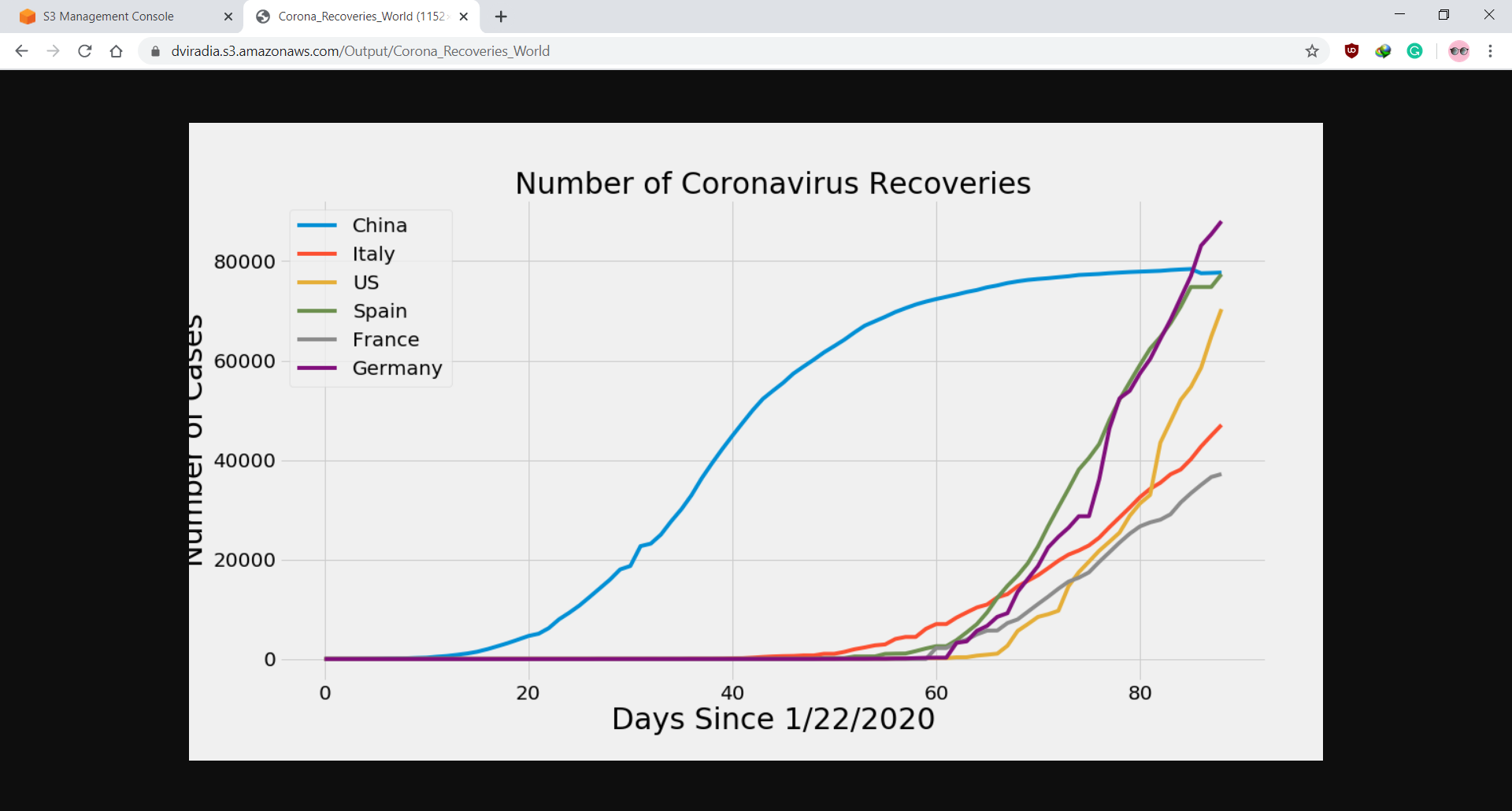


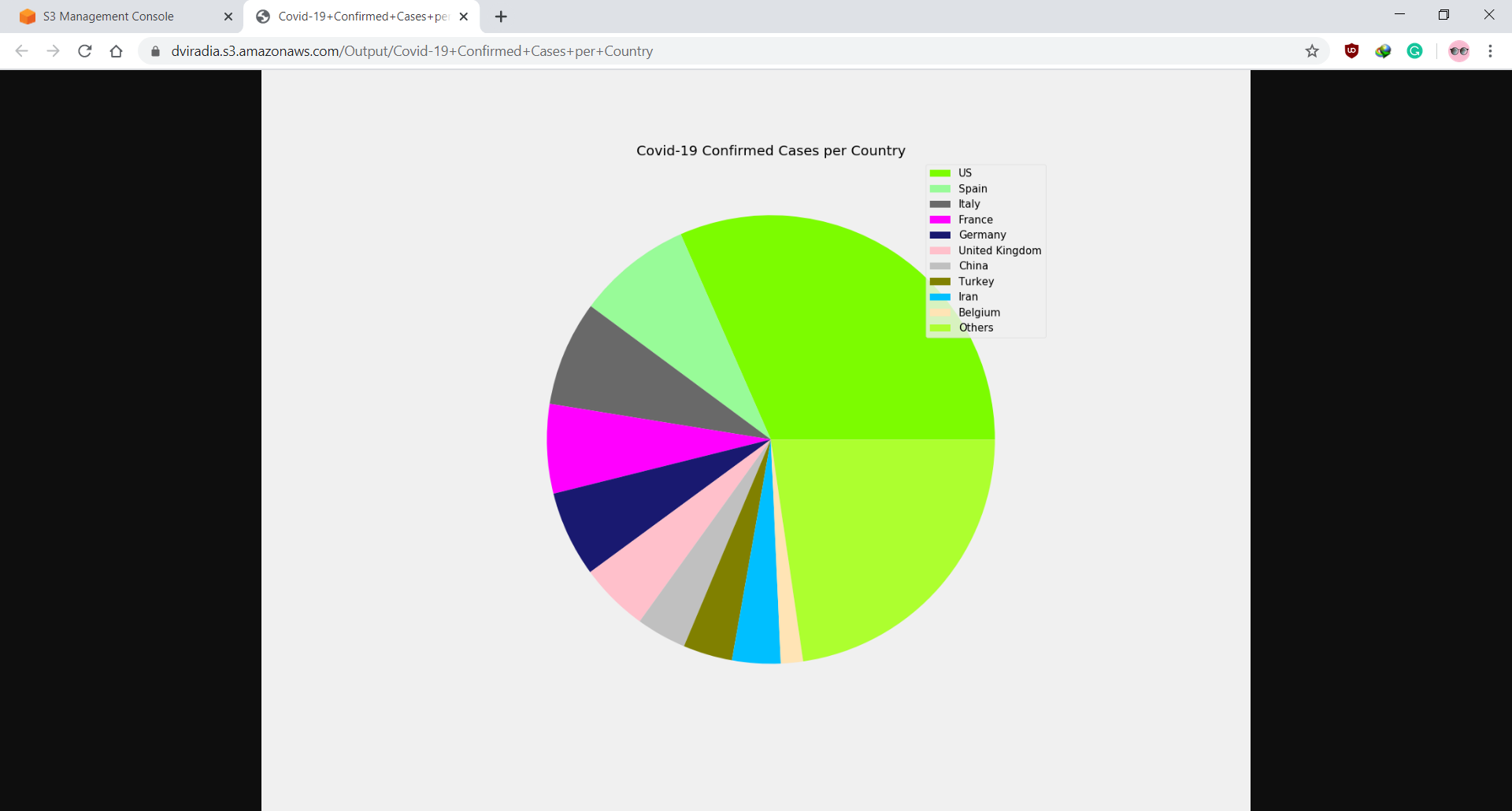




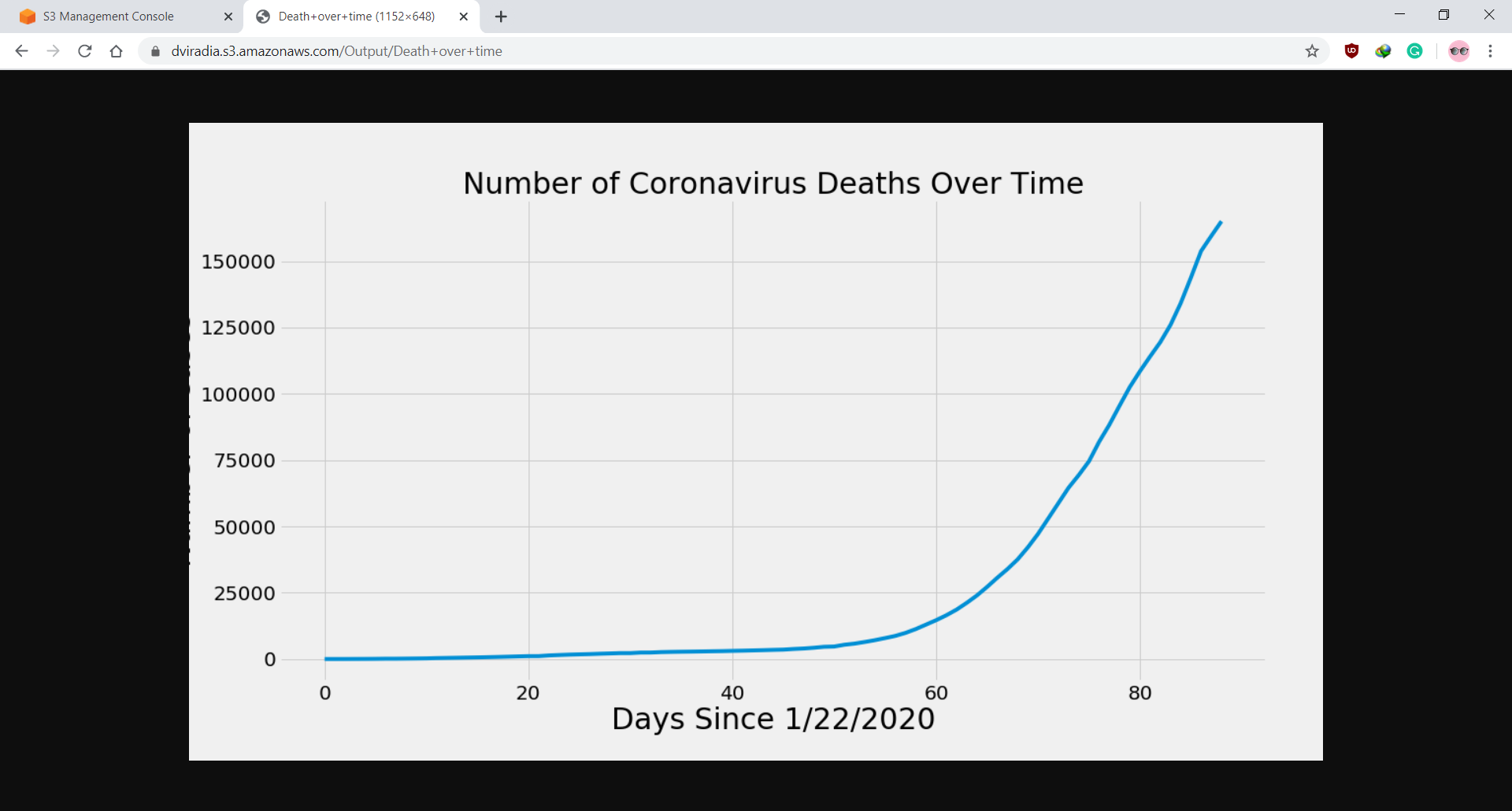


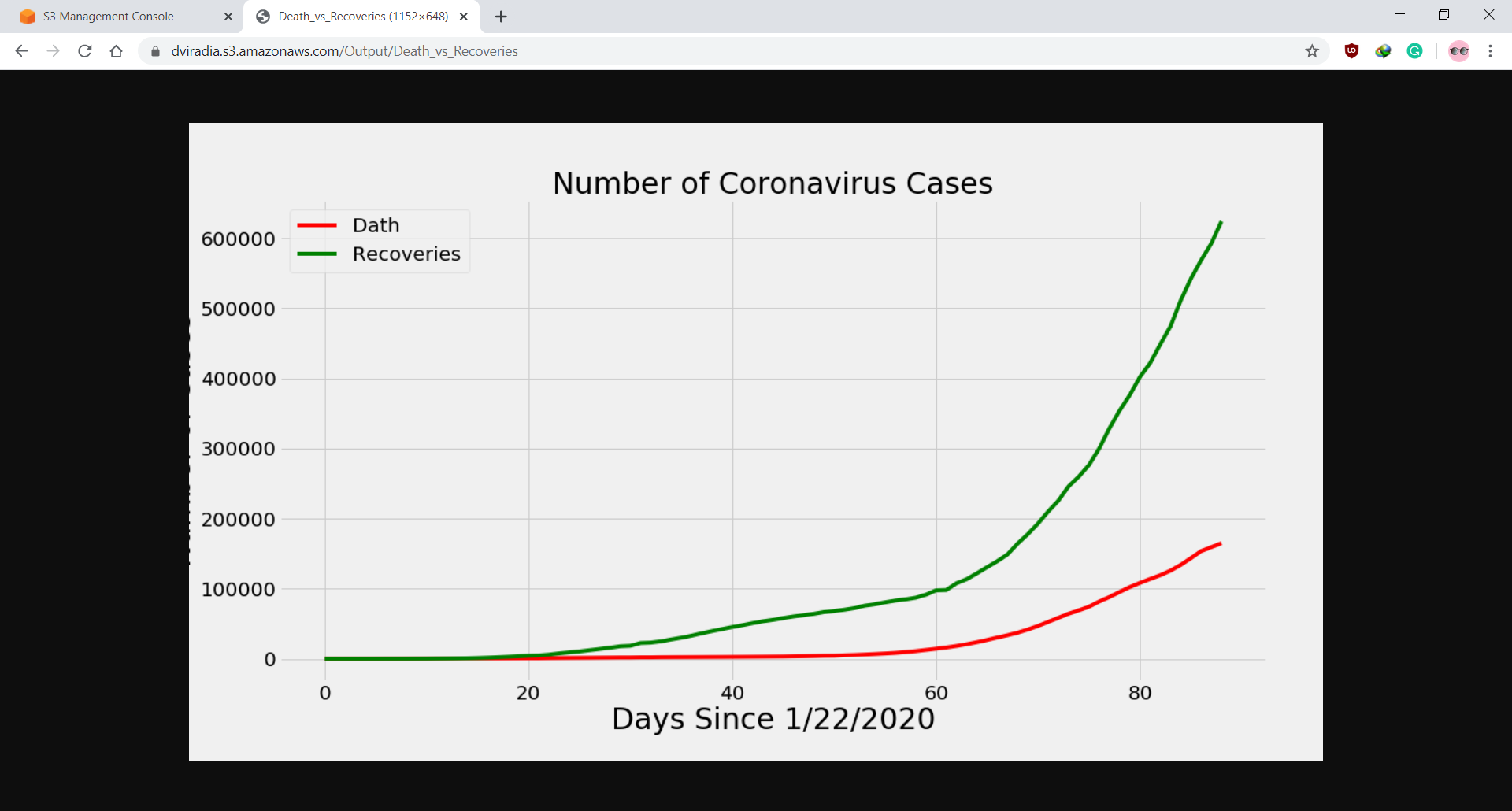


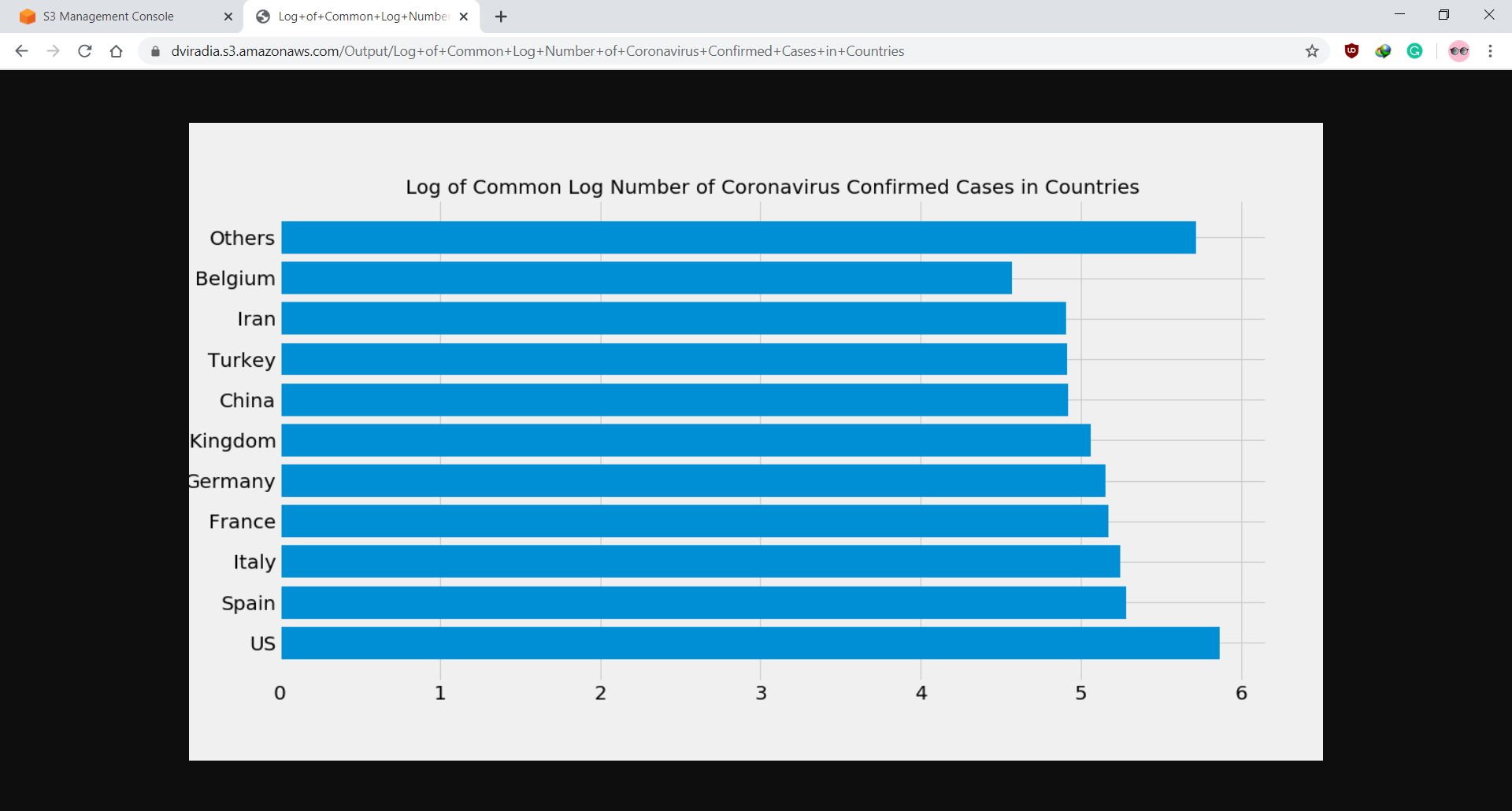


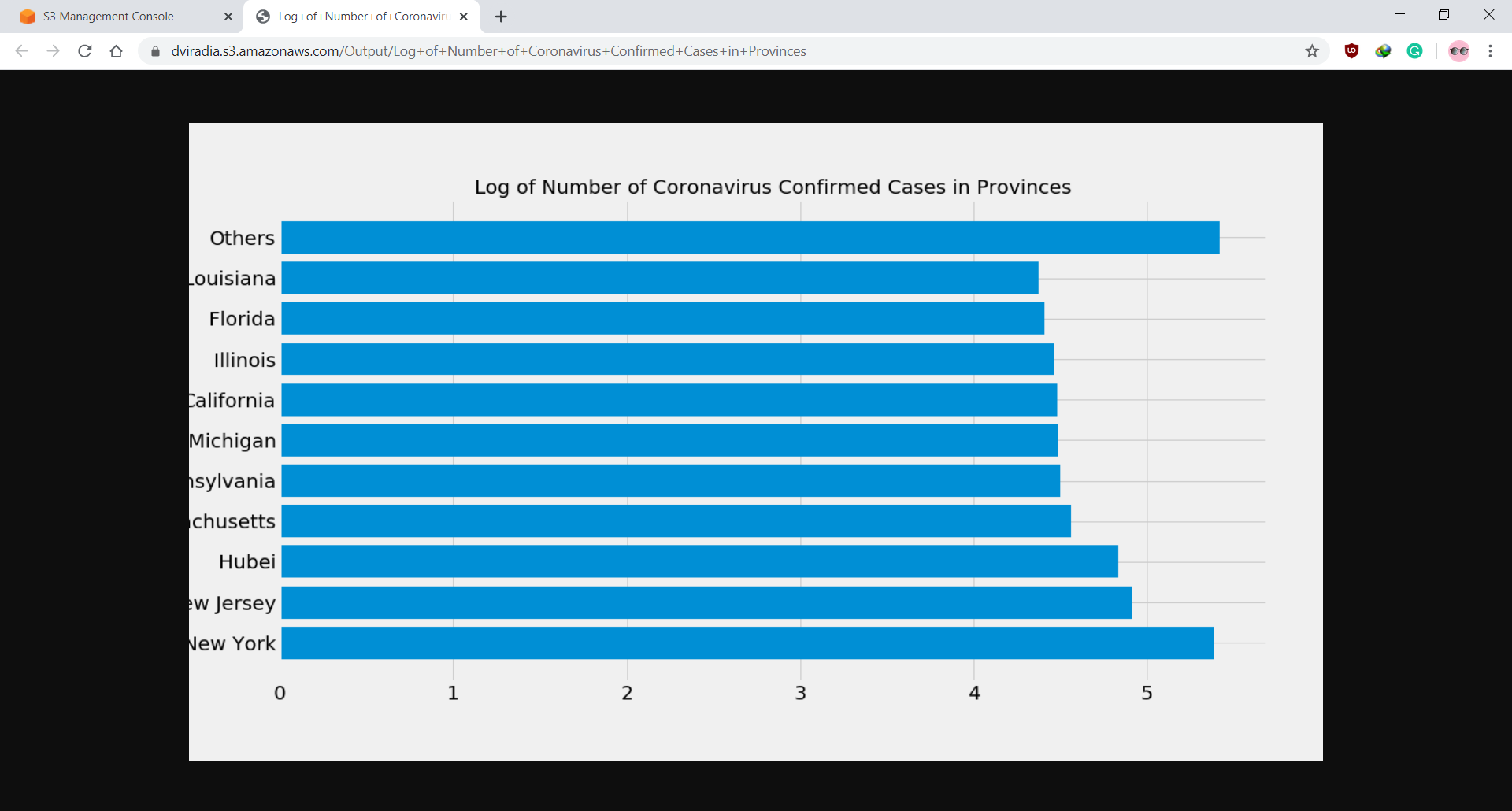


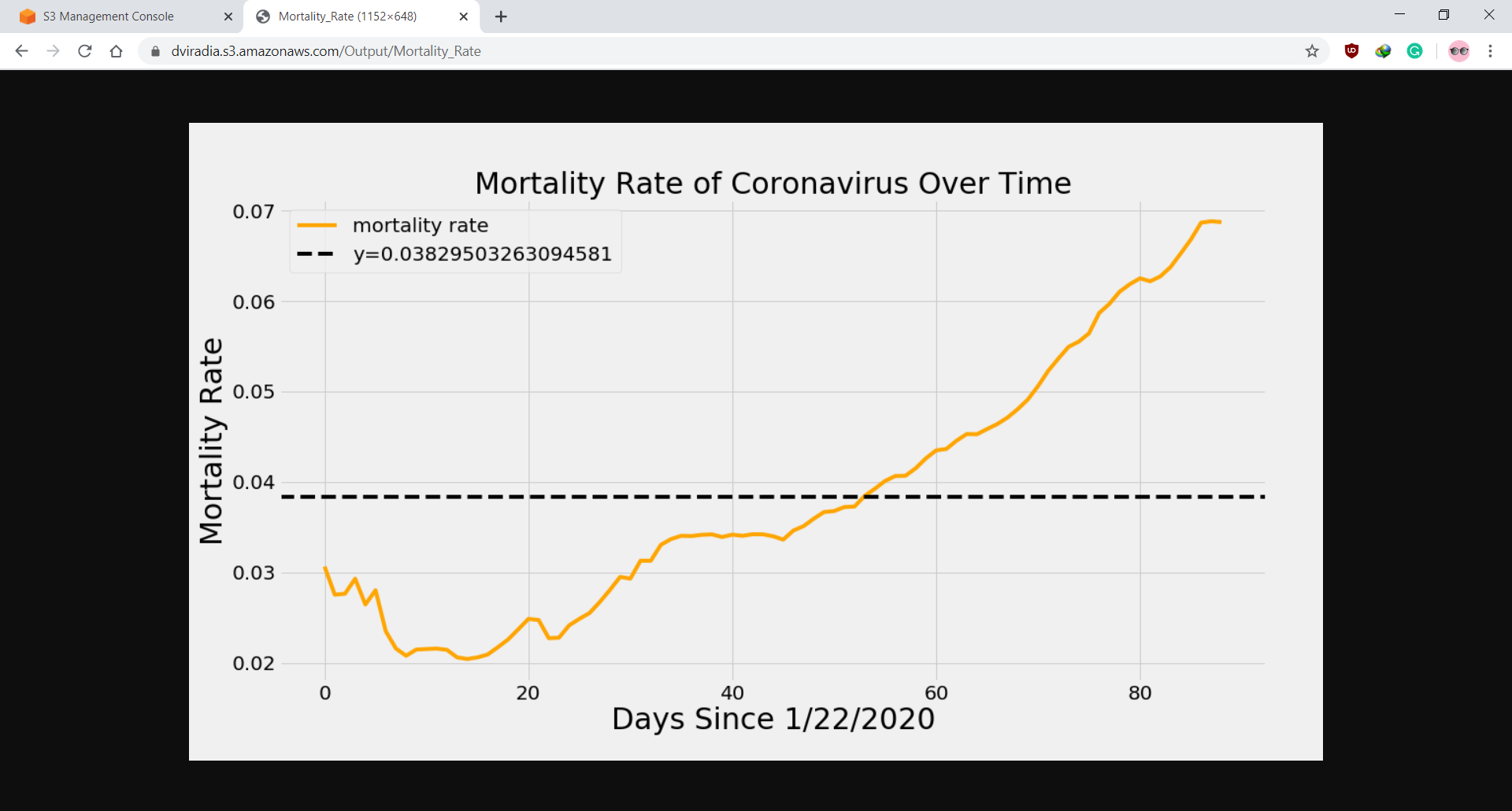


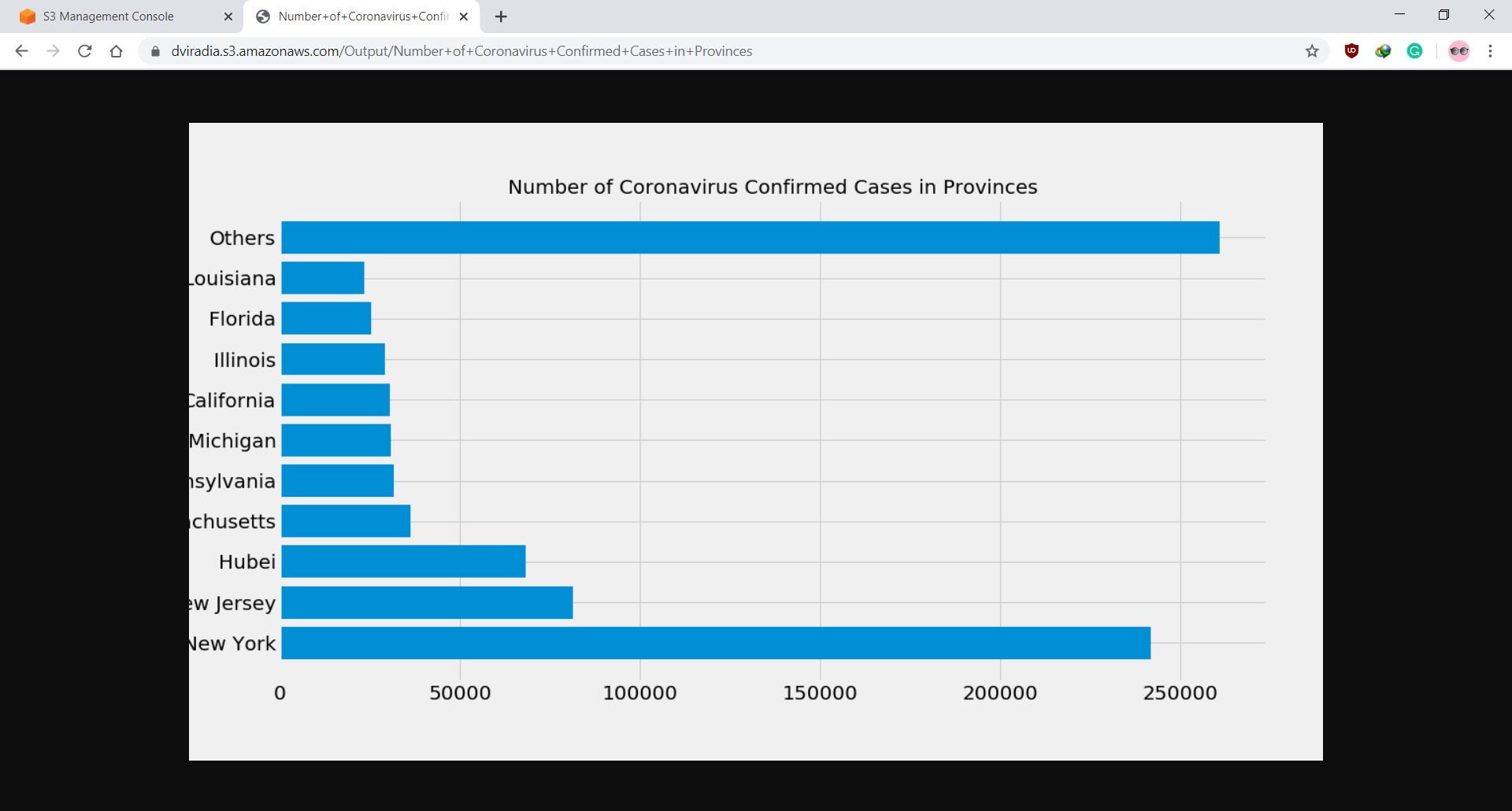




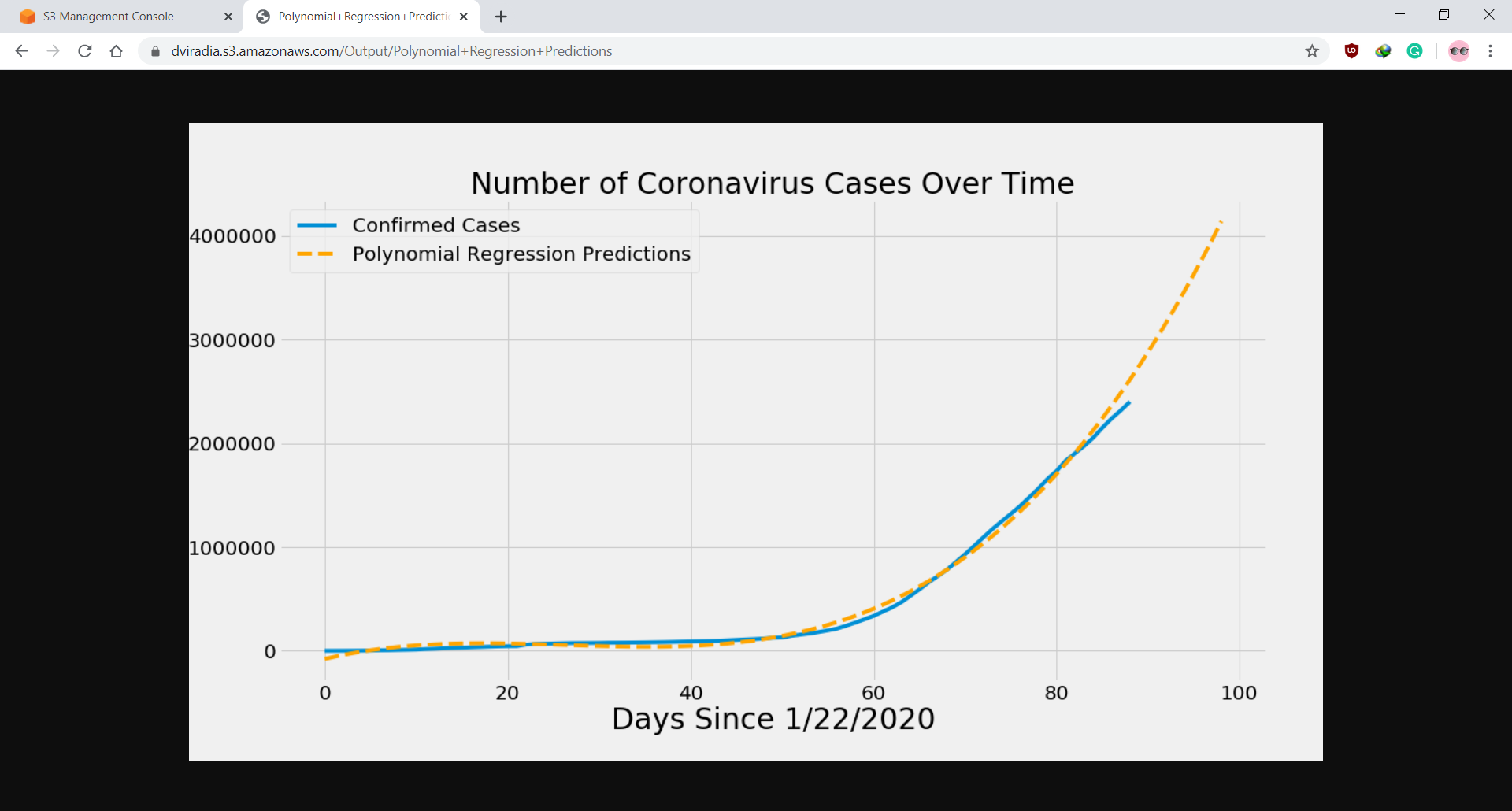


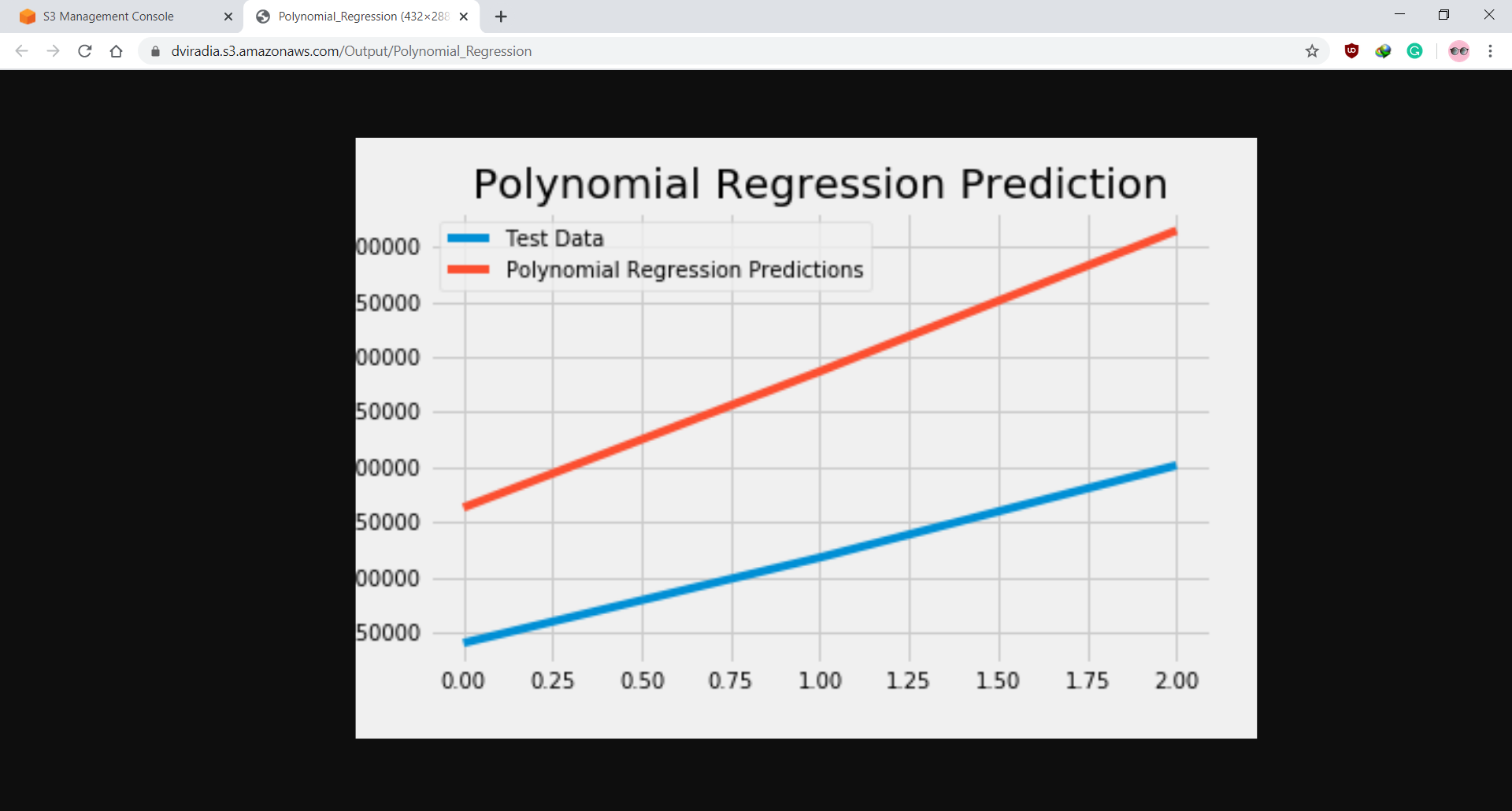




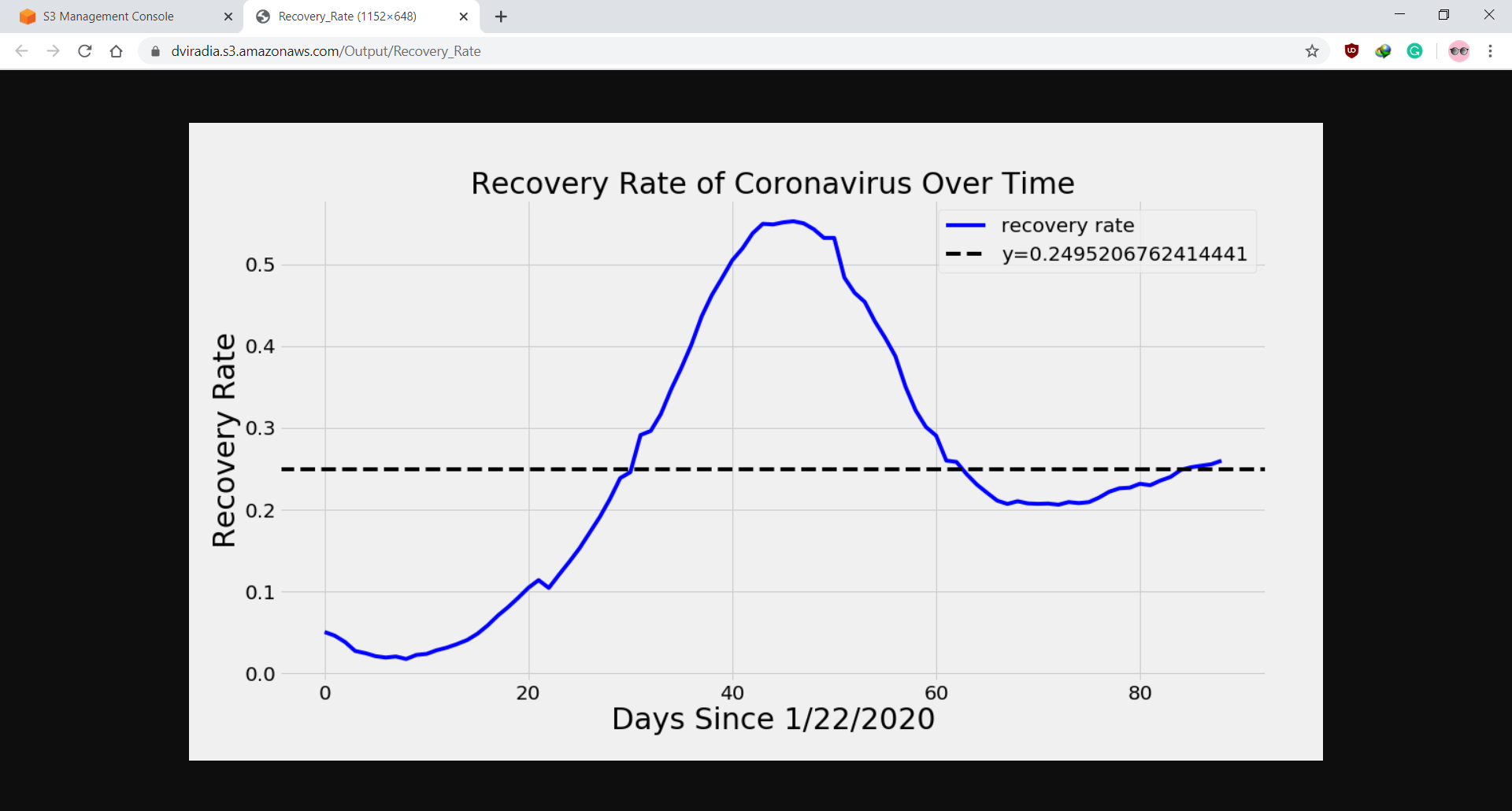




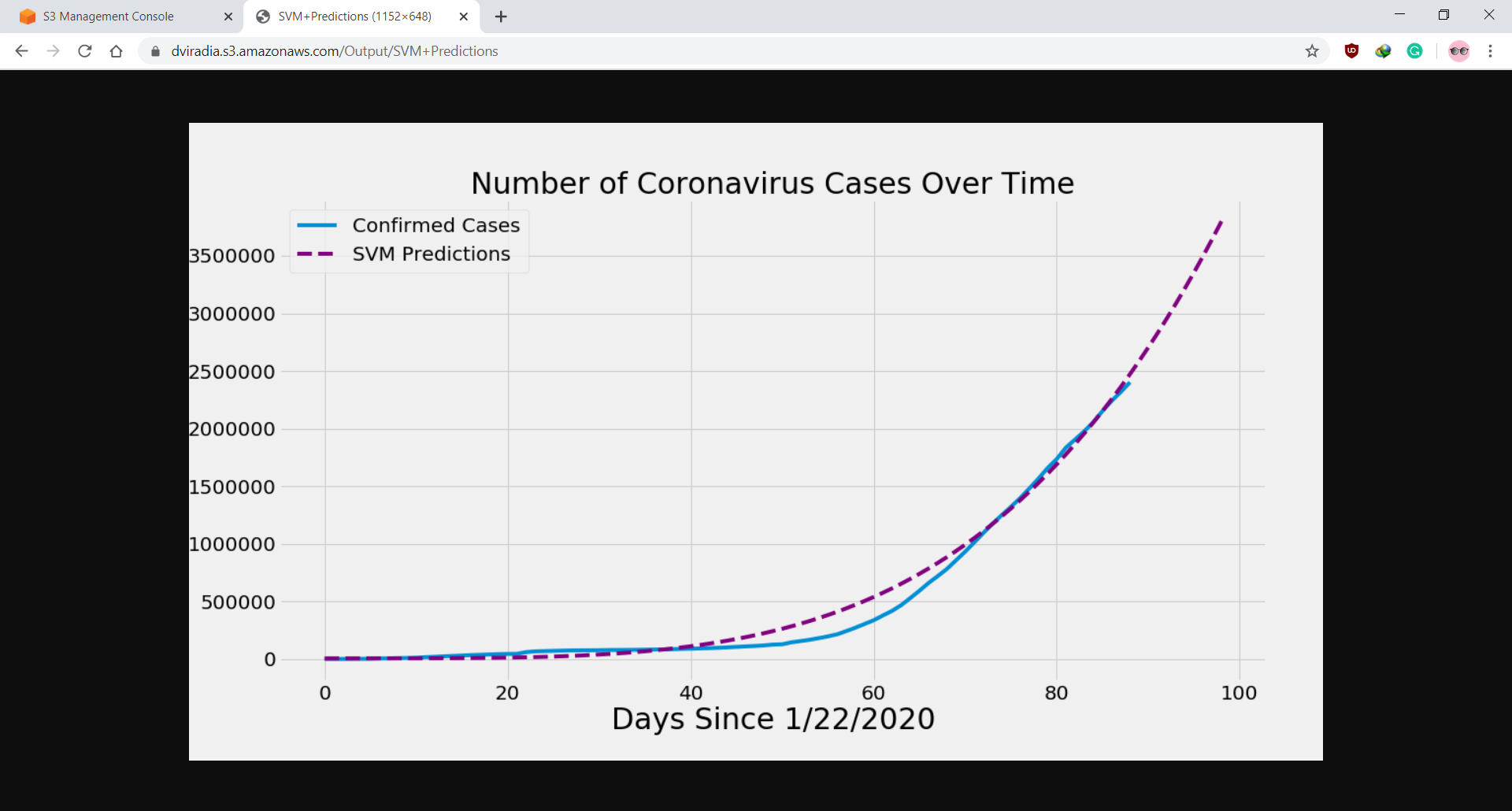


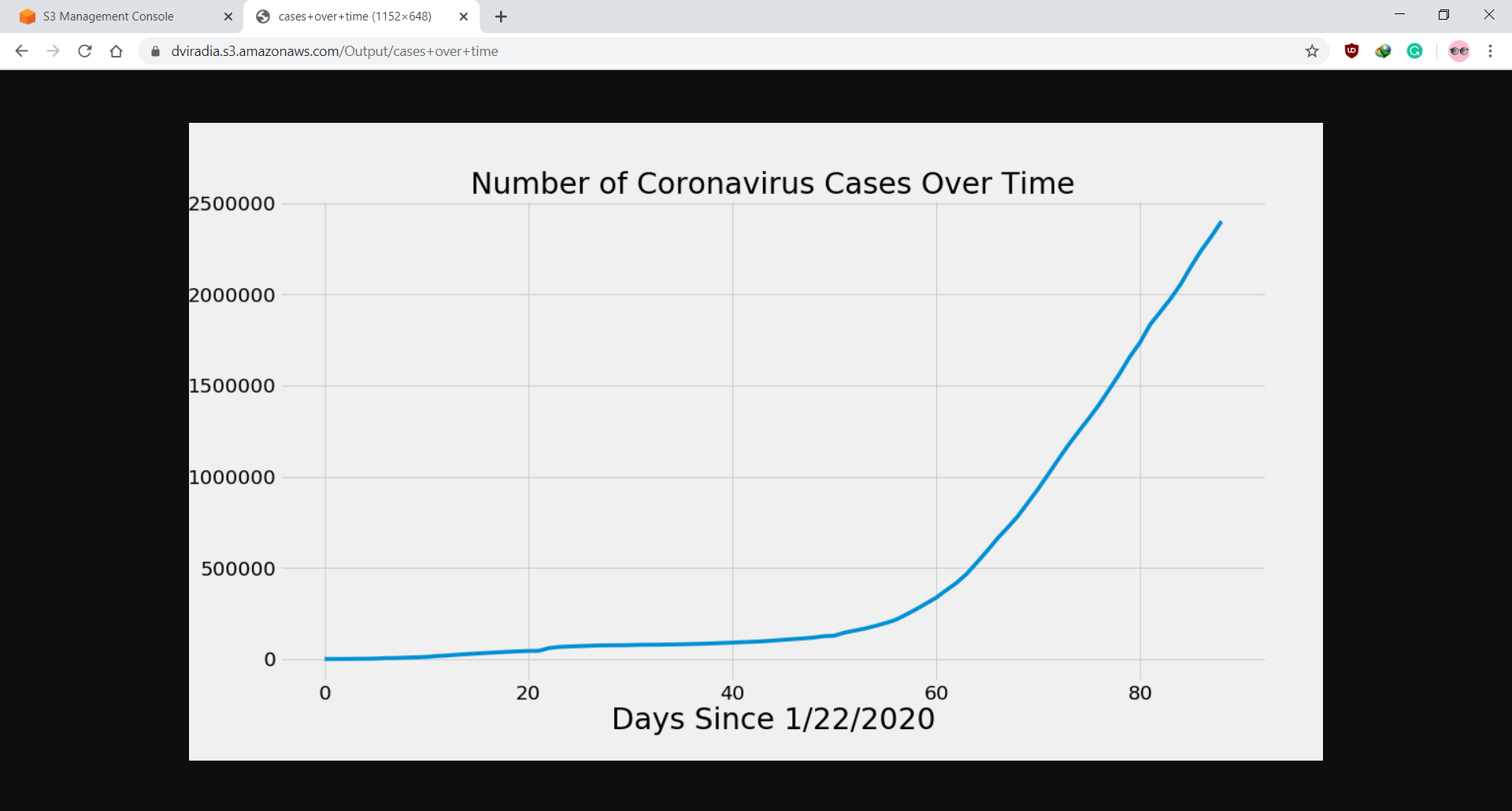












* The Amazon Sage Maker takes raw data from the given files and process that input into various Graphs.

Graphs represents COVID-19 Data into various categories such as Active Cases, Recovered Cases, Number of Death and Total Number of Cases Recorded and they are also filtered on various basis such as country, states, worldwide and many other categories.

There are various Types of Graphs Such as Pie Chart, Bar Graphs, Line Graphs and even Tabular Representations.