- Downloaded the five data and code provided from the google drive in the Lab 5.

- Creating an Amazon S3 bucket.

A screenshot of a computer

Description automatically generated

A screenshot of a cell phone

Description automatically generated

- Uploaded the datas and code provided into the S3 bucket and leave it as default making it not public.

A screenshot of a cell phone

Description automatically generated

- Open Amazon SageMaker from Services, Create notebook instance in Amazon SageMaker:

A screenshot of a social media post

Description automatically generated

- Launching a Notebook instance and same time creating the new IAM permissions for the Amazon S3 bucket we had created.

A screenshot of a social media post

Description automatically generated

A screenshot of a social media post

Description automatically generated

- Load the notebook, Open Jupyter or Open JupyterLab.

A screenshot of a cell phone

Description automatically generated

- Uploading the python file code into the Jupyter notebook.

A screenshot of a social media post

Description automatically generated

- Editing the bucket name and running the code on each line of notebook.

A screenshot of a social media post

Description automatically generated

A screenshot of a social media post

Description automatically generated

A close up of a map

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A picture containing screenshot

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a map

Description automatically generated

- Checking the output folder in the Amazon S3 bucket we had created.

A screenshot of a computer

Description automatically generated

A screenshot of a cell phone

Description automatically generated

- Amazon SageMaker: Machine learning seems easy to learn but in fact it is not a lot of time is taken for learning data preprocessing, selecting the algorithm and framework, after finding out which algorithm to use we have to train and tune our model and also integrate and deploy the model. Now, this is where Amazon SageMaker steps in : - it reduces complexity by letting it do all the above things in one platform, provides independency we can build a new model or, like we did we have taken some model built somewhere else and then deployed it using AWS SageMaker the choice is given to us. Giving flexibility, AWS SageMaker: builds Machine Learning models, deploy them. Looking at AWS SageMaker does:

- Select and Prepare Training Data

- Choose and Optimize ML Model

- Setup and Manage Environment for Training

- Train and Tune Model (Trial and Error)

- Deploy ML Model to production

- Select and Manage production environment

It manages on demand needs, scaling and managing the environment even that is handled by AWS SageMaker.