Lab1:

1) Policy- Iot core-> Secure-> policy (iot:*, *)
2) Things- Iot core->Manage->Things (default) and download the certis (Attach the policy
3) In python code: change the thing name and for the Configure endpoint: (put url of thing-> interact-> copy)
4) Subscribe to a topic: Create a topic in the subscribe part (by going to test in iot core). Run the python file and see if the msg from python is sent to the aws test client
5) Publish to a topic: Once again create a topic in the subscribe part and then, run the publish code of python and go to test-> publish the topic msg-> input will be seen in the python file-> input any key to exit

---

Lab4:

1. CHANNEL: Iot analytics-> channel-> storage type(aws manage store)-> topic filter(`update/environment/#`) -> IAM role-> create new
2. DATASTORE: datastore (channel page)->create-> id-> next-> aws managed->JSON(data format)
3. PIPELINE: create->id->pipeline source(prev made channel)-> set attributes->(enter the attribute)(type: numeric and string)-> no activities chosen-> next-> edit-> (select the data store)
4. DATASET: create-> create sql-> id-> edit datastore-> sql query-> next->next->create
5. CORE iot: Publish update/environment/1 and click publish
6. Monitor-> check the current successful connection tab
7. Iot analytics-> dataset-> side panel(Actions)-> run now-> check the results in result preview
8. SAGEMAKER: sagemaker-> notebook instance-> fill the details-> new roles->make the note of ARN
9. IAM console (to grant permission): modify sagemaker role-> open the role-> managed policy-> add inline policy-> get dataset content-> review-> name and create policy
10. Analytics console-> notebook-> create->choose blank notebook-> setup page(enter name)-> select data set (dataset created)-> select notebook instance(previously created)

Lab9-
UPLOADING DATASET:
Iot core-> act-> rule->create a rule-> select query as per the topic-> select action-> republish aws-> update/environment/1-> create role->create role
Run publish file-> goto iot analytics-> dataset-> run now-> see the data being loaded

SNS:
topic-> fifo-> name-> create
subscriptions-> create subscriptions-> choose topics arn(select the topic prev made)->
protocol(email)-> create-> in email box-> confirm subscription->
topics-> publish message-> enter message details->check mail

Iot core-> create rule(refer above)->add action as sns-> add action and create rule
test-> topic1-> subscribe-> run python file-> check mail

Lambda:
Lambda console-> create function-> use a blueprint-> hello world-python ->
configure->functionname->create a new role from aws policy templates-> role name-> add policy(sns publish policy)-> configure
Goto lambda.py-> copy the code-> and change the sentence to be displayed-> add variable->deploy

Copy the arn of sns topic

lambda->test-> add the json file-> paste arn of sns-> invoke

create rule-> (as referred above)-> add lambda as action
test-> topic1-> subscribe-> run python file-> check mail
