Cloud Computing report

Lab 3

We will describe how the project work by describing the different entities involved and their functions and goals.

* EC2

EC2 is the instance of AWS which is able to make calculations by definition. In our case, the EC2 worker will get the message, a list of 20 integers and will run a Python script to calculate what we have to. To be more precise, we need *minimum*, *maximum*, *mean,* and *median.* The Python lines are available on the GitHub by themselves.

* S3

S3 is the instance of AWS which is able to store data. It will be important to store the outputs of the calculations did by EC2 as well as the log files to keep a track about what happened on our cloud.

* SQS queue

Finally, about the AWS services we will need SQS (Simple Queue Service) too manage our messages and responses. Considering the fact, we are working with Python, we will use it by the *boto* library which is supplied by AWS.

All our scripts are written in Python thus we had to find a way to link AWS a Python, our scripts are hosted on AWS but to simplify the client interface we moreover used Jupyter.

* Jupyter

Jupyter is a tool used to run python scripts, to do so, we had to install first anaconda and Jupyter on our EC2 instance, then we could connect to it and run code though the instance.

As a result, we have on one side the EC2 instance with Jupyter, S3 database to store the data from the scripts, and the SQS service that allows us to prioritise demands.