Notes Johnny Lai

Question 1

Fibonacci Recursive

Tried to implement it with recursive method only, but not succeed. The normal recursive solution calculate the solution from the input number and go downs recursively, until 1. In this question, the requirement is, it needs to stop once the solution is equal or smaller to the input number. Also, it requires to print the fibonacci start from 1. So, that's why a for loop is there, it will check whether the current solution is larger than input number. Once it larger than the input number, it will stop.

Fibonacci Iteration

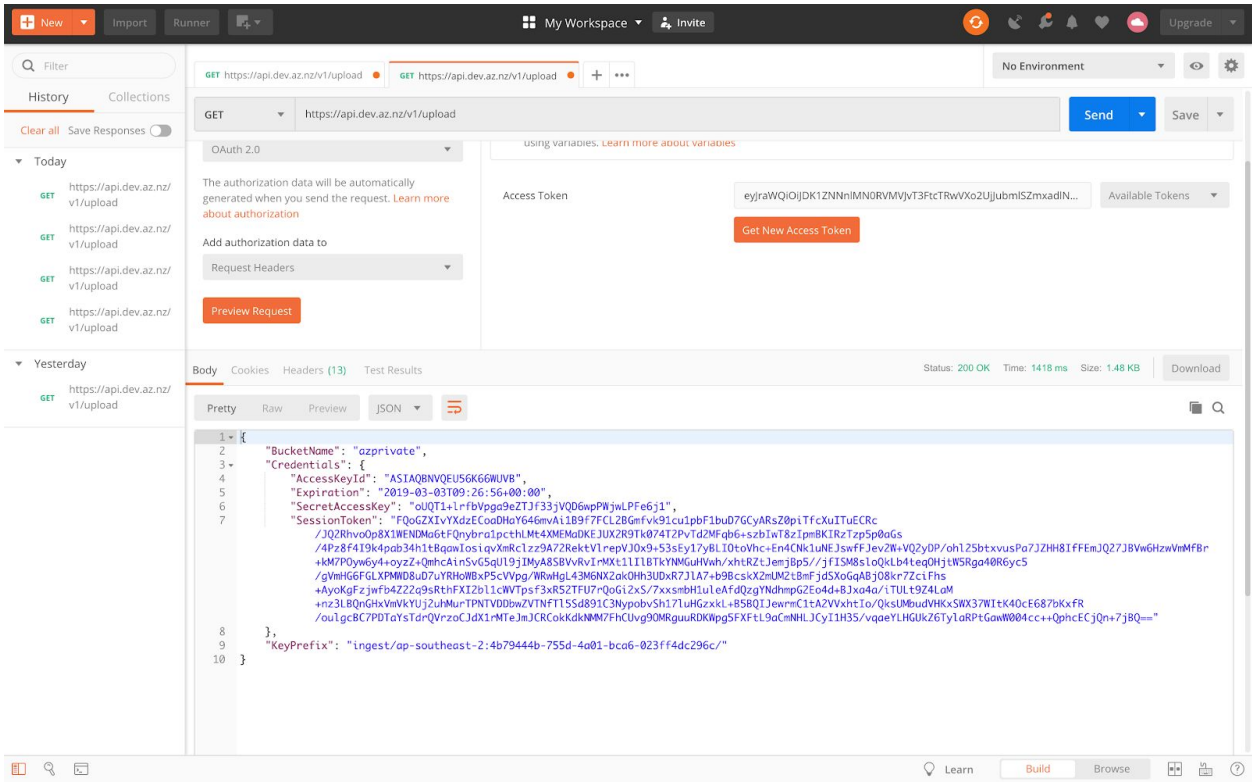
Typical iteration solution, provides the first 2 fibonacci numbers and use the variables to remember the last 2 fibonacci numbers, then sum up in each iteration. In this question, the requirement is, it needs to stop once the solution is equal or smaller to the input number. Also, it requires to print the fibonacci start from 1. So, there is a IF clause to check, if it larger than input number it will stop and exit the loop.

Question 2

Tried to show the CSV in command console, but the CSV contains 1000 records, so switched to the JTable solution. First, read all records to memory, then store it in arrayList and perform the sorting requirement provided by user in input argument. If user do not provide input argument, by default we would sort by ID. As JTable not accept arrayList, so converted into 2 dimension String array.

Question 3, 4

Tested the HTTP Post request in Postman before implemented it.



Implement the program with Apache HTTP client library, it helps to encapsulates the parameters easier, so I can concern on the program logic.

*In question no.4, the instruction mention that it should use the “POST” request, but it will returns “Message": "User is not authorized to access this resource" only, so I implemented with “GET” request instead, which return those key and parameters properly

Question 5
Tried to use the AccessKeyId and SecretAccessKey but pass through the authentication, but not succeed. Then I found the solution in official documents, it called “temporary credentials obtained from STS”.
https://docs.aws.amazon.com/sdk-for-java/v1/developer-guide/credentials.html

Then uploads the file, it was smooth, without exception and the program ended gently. Unfortunately, it did not provide any response about the status of upload. I tried to use ListObjectsRequest to find the uploaded file, but rejected with not enough user privilege. I tried

to get the putObjectResult returned by the putObjectRequest, but still reading the API to read the stuff inside. But as the whole file upload process did not throw any exception, so I believe it was succeed.