Case Study: Capital Call Calculation

Software Developer

The aim of this exercise is to expose you to the kind of problems you will be working on and for us to evaluate how you can independently bring your own knowledge up. You are allowed and encouraged to search for reference materials that will help you undergo your task and we would also be happy to discuss your findings. We ask that you complete the case study and send your results back to us along with the approximate amount of time you spent.

Please send us the codes by https://github.com/ and share the instructions and implementation with readme.

We will consider the following for bonus points for this case study:

- Write tests

We hope you can gain a better insight of what you would be doing as a member of the Technology Team at Validus, learn about the Alternative Asset Management space and hopefully enjoy the time spent while working on this.

Good Luck.

Validus Fund V is a Private Equity Fund and invests in several kinds of Assets in North America. The fund managers need a system to determine which investor(s) they need to call in order to invest in a new investment. The methodology they implement is 'First In, First Out (FIFO)' – please find examples below for how it works.

Example I:

- They have three commitments as below table
- Nothing is called before
- They decide to invest in 'Investment I' on 1st July 2019 for $15,000,000

Commitment ID	Fund	Date	Amount
1	Fund 1	01/12/2018	$10,000,000
2	Fund 2	01/03/2019	$10,000,000
3	Fund 1	01/06/2019	$10,000,000

In this case, the managers will need to call $10,000,000 (Commitment ID #1) from Fund 1 and another $5,000,000 from Fund 2 (Commitment ID #2).

Example II:

- They have three commitments as below table
- Nothing is called before
- They decide to invest in 'Investment I' on 1st July 2019 for $25,000,000

Commitment ID	Fund	Date	Amount
1	Fund 1	01/12/2018	$10,000,000

| 2 | Fund 2 | 01/03/2019 | $10,000,000 |
| 3 | Fund 1 | 01/06/2019 | $10,000,000 |

In this case, the managers will need to call $15,000,000 ($10,000,000 from Commitment ID #1 and $5,000,000 from Commitment ID #3) from Fund 1 and another $10,000,000 from Fund 2 (Commitment ID #2).

You are given a prototyped application by Excel – the orange tabs are those required to show on the application and the blue tabs are those required to store on a database or a JSON file format. Please build a web page to achieve this task by using the language you are comfortable with.