Professor,

I have couple questions related to Home Work 2. I got a lot of questions answered by TA but these two I need to ask you.

1. We are asked to price “vanilla” options. What is the “vanilla” in the context of the assignment? Is it a Call, a Put or a set of both? If it’s both, in what form we suppose to return "vanilla" from the function within “TV”?
2. What is rateCurve? Does it replace the constant “r” that we used before? Is it to model how rate changes over time? If so, what is the size of this array and how it is aligned with the size of “checkpoints”?

I’ve got answer from TA saying that I need to go the website of US Department Of The Treasury and download Treasury Yield Data which I can then use to get “r” calculated using linear approximation. It did answer my question partially. I found Treasury Yield Data. I’m trying to understand in what form it will be passed into our function. For example, if we have this data:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **1 Mo** | **2 Mo** | **3 Mo** | **6 Mo** | **1 Yr** | **2 Yr** | **3 Yr** | **5 Yr** | **7 Yr** | **10 Yr** | **20 Yr** | **30 Yr** |
| 09/01/20 | 0.09 | 0.11 | 0.12 | 0.13 | 0.12 | 0.13 | 0.14 | 0.26 | 0.46 | 0.68 | 1.20 | 1.43 |

Should I expect that rateCurve will be passed as a numpy array like this: [0.11,0.12,0.13,0.12,0.13,0.14,0.26,0.46,0.68,1.20,1.43] ?

Thanks in advance,