## Final: ELS Pricing

## (Due: Oct. 22, 2022, 11:59 PM)

You have to do all work on your own. You are not supposed to discuss with other students. If any dishonest act are found, you may face severe penalty.

Choose any ELS written on two underlying assets. To find an example, you may visit homepage of security investment banks.

1. What is the name of ELS?

2. Explain payoff structure.

3. Specify parameters precisely.

4. Price the ELS using ADI FDM or OS FDM. You have to describe the whole procedure of pricing scheme.

5. Simulate paths of underlying assets and calculate the price. Compare simulated price and FDM price with the price the bank suggests. Discuss why the gaps between prices happen.

6. Calculate Greeks (deltas, gammas, cross-gamma, vegas) and explain price movement according to Greeks

7. You may add hedging analysis if you can.

8. Program codes should be handed in with documents together.

9. Zip all files into one and upload VIA KLMS.

10. Office hour for the grade of final assignment is 2:00 – 3:00 pm, 27 of Oct.