**Outline**

1. Recap pytorch by implementing a simple NN from scratch
2. Learn how to make a non-fully conncected layer with binary weights
   1. Useful links:
      1. <https://chatgpt.com/share/67b50566-05a4-8007-9198-1118d7865d6c>
      2. [python - Create custom connection/ non-fully connected layers in Pytorch - Stack Overflow](https://stackoverflow.com/questions/72725944/create-custom-connection-non-fully-connected-layers-in-pytorch)
3. Learn how to get access to the weights for a specific layer at each iteration
   1. Useful link
      1. <https://stackoverflow.com/questions/56435961/how-to-access-the-network-weights-while-using-pytorch-nn-sequential>
4. Learn how to implement your own custom loss function
5. Try to build a model and test it on simulated data
   1. Simulate the data in such a way that you generate features which are then used to generate the response and then you add noisy features which have almost no correlation with the response