PART A

Look around your environment, identify a problem/challenge that machine learning model can solve.

1. Describe the problem

2. How and why do you think machine learning can solve the problem?

3. What kind of machine learning is best fit for the problem (supervised, unsupervised, reinforcement?)

4. Decide the best algorithm for that problem. Explain why you choose that algorithm?

4. Describe the kind of dataset you would need to solve that problem

5. Explain in details the expected outcome of machine learning application to that problem. How will the machine learning application change the situation? What change should be expected

PART B

Develop a simple neural network model using MATLAB toolbox (input-output curve fitting-(“nnstart”)). Use any DATA of your choice (default data in the toolbox, or your personal data). Note the parameters you select for your model, such as training algorithm, number of hidden neurons. Save all necessary performance evaluation metrics and graphics from your toolbox and report all.