Part A–*RandomBricks Ltd.*

RandomBricks Ltd, an imaginary estate agency based in the North of England, has been gathering data on the properties they help sell, buy and rent. With market conditions becoming increasingly competitive and profit margins shrinking, RandomBricks is seeking support in improving their existing model that can estimate property values; their current model explains only about 70% of the variance. However, the company's CTO is cautious about adopting complex, opaque solutions. They would prefer a model that is both parsimonious and interpretable, even at the expense of some predictive accuracy. This is to ensure that valuation decisions can be clearly explained to clients, regulators, and internal stakeholders.

Please deliver a report with a maximum of 500 words and 3 figures on how you have deciphered the data and provide RandomBricks Ltd. with appropriate insight to the problem. Report also any issues or limitations in the data and provide the code you used to perform the analysis and modelling.

You are free to use whichever methods you see fit and may submit the report and code in any format you wish, ensuring that the interview panel can assess them. Note that we do not expect you to spend more than four hours on this task.

Please also be prepared to answer questions about your report during the interview.