BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

July 2022 CSE 218 Online Assignment on
Linear and Non-Linear Regression (B1)

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Linearize the model $y = a + bx + \frac{c}{x}$ and using it write a python code to estimate a and b based on the following data. Develop a plot of your fit along with the data. Predict the values of y at $x = 2.5, 5.5$ and show it in the plot. Assume least square fit for this problem.

You are not allowed to use any library function like `polyfit` or `lstsq` to fit your model.

x	1.0	2.0	3.0	4.0	5.0
y	2.2	2.8	3.6	4.5	5.5

Marks distribution:

- Linearization: 8
- Parameter estimation: 8
- Plotting: 4