I worked on these steps recently:

1. I looked at the data shape in the file called <u>'understanding shape of data used</u> in the original article.ipynb'.

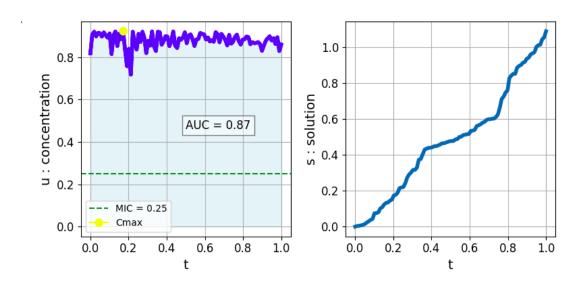
This helped me understand the data's shape, so I could adjust our own real data accordingly.

2. I tried to make a dataset using the given equations, but it didn't work well. So, I went looking for a real dataset. I found one at this web address:

https://pk-db.com/data?tab=outputs

The file I used was **'outputs.csv'**. I cleaned up the dataset and organized it into a table with two columns: one for the <u>concentration</u> of paracetamol and another for <u>time</u>. **'Cleaning and preprocessing real data.ipynb'**

3. I ran the code on this' real dataset in the file real data within original code.ipynb', and it produced a plot showing something called AUC and MIC.



In conclusion, the plot didn't show the expected pattern of decreasing concentration. I realized this might be because I only used the first 100 values out of 353 in the real dataset of the cleaned one. I think I need to pick 100 different values from the total 353, rather than just the first 100."