

For this question, I have two interpretations, thus I submit both versions of code. But I think 5.2.py make more sense though the code is lengthy and tedious;

For the first version, the main idea is the list of arrays.

Create the array A which contains the x y and z values. Now use the array to perform RK4 with x , y and z incrementing together. And then pull out x, y and z each into its own list and do the plotting.

For the second version, x and y and z don't increment together. Thus, I have to write RK4 for each of them (x,y,z) since their function is different and only one of them are changing. It will produce the similar graph as version1 do but I think It make more sense since only one of them should be considered as variable and others are just constant.