Name: Id#   Date# 11/12/2021

Q1. Solve the following system of linear differential equations:

$$\frac{dx}{dt} = (k+1)x + (k+1)y + k$$

$$\frac{dy}{dt} = kx + (k+2)y + k + 1$$

[**Here $k \neq 0$ is the 7th digit of your student Id# . If $k = 0$ then choose $k = 1$.**]