**Sample 5b**

**The differential equations for the Predator-Prey Problem are:**

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**where H is the hare population, L is the lynx population, and K1, K2, C, D, S1, and S2 are 2, 10, .0012, .0019, .63, and .57, respectively.**

**Write a MATLAB program as follows:**

**1) t will go from 0 to 9 sec in steps of .001 sec .**

**2) Calculate H and L for each value of t. Use 1e-7 as the accuracy factors**

**and 4000 and 200 as the initial values of H and L.**

**3) Plot H and L versus t using the colors blue and red. The graph should**

**look like the one on the attached sheet.**