Consider the population of a bird species consisting 100 hatchlings and 200 adults this year(t=0). The average fecundity of hatchlings next year is 0.8, the average fecundity of adults next year is 1.2, the survivabilities of hatchlings and adults are 0.6, 0.5, respectively.

1. Write down the leslie matrix.
2. Estimate the number of hatchlings and the number of adults next year(t=1).
3. Estimate the number of hatchlings and the number of adults the year after next year(t=2).
4. Estimate the number of hatchlings and the number of adults three years after(t=3).
5. Estimate the number of hatchlings and the number of adults ten years after(t=10).