Lua note recursion

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A farm bought a cow the first year, and it will born a little cow, and after this each year this cow will born a new one. the new borned cow could born new one after four years. And each year could born cow after this. How many cows in this farm after 50 years.

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1. function countCow(year)
2. local yearStep = 4;
4. if year < yearStep then
6. return 1;
7. else
8. return tonumber(countCow(year-1)+countCow(year-3))
10. end
12. end
13. print(tostring(countCow(22)))

There is a lotus pond in the beginning there is a lotus, every day the number of lotus will double. Assuming that the lotus will never wither, 30 days when the lotus pond full of lotus, I would like to ask the lotus lotus flower pool twenty-third days a few points?

1. function flowerNumber(day)
2. if day == 1 then
3. return 1;
4. else
5. local flowerNumbers = tonumber(flowerNumber(day-1)\*2)
6. return flowerNumbers;
7. end
8. end
9. print(flowerNumber(9))