Lab 1 Plan:

Goal: calculate no. of years required for population to grow from start to end size

* **If less than 9, user needs to re-enter until it’s >=9**
* **If enter number less than starting population, user needs to re-enter until it’s greater or equal to starting population**
* Calculate the no. of years required for population to reach at least size of end value
  + start size= no. of llamas
  + born=currentPopulation/3= new llamas born
  + died= currentPopulation/4 = llamas passed away
  + currentPopulation = startSize + born – died (after one year)
  + endSize= what the user inputs

int startSize= 24

int endSize = 30

int born = startSize/3= 8

int died = startSize/4=6

int endYear = startSize + born – died = 24 + 8 – 6 = 26

Year = 1

int currentSize= 26

int endSize=30

int born = 26/3=8

int died = 26/4 = 6

No. of years = 26 + 8 -6 = 28

Year = 2

int currentSize= 28

int endSize=30

int born = 28/3=9

int died = 28/4 = 7

No. of years = 28 + 9 -7 = 30

Year = 3

No. of years to reach endsize = 3 years

Condition: stop repeating when startSize>9

* repeat:
  + Scanner sc= new Scanner(System.in);
* System.out.println("Start size:");
* int a;
* a=sc.nextInt();

Loop:

* + start size= no. of llamas
  + born= X/3= new llamas born
  + died= X/4 = llamas passed away
  + populationAfterOneYear = startSize + born – died (after one year)
  + endSize= what the user inputs

currentPopulation = what the user inputs = startSize

currentPopulation needs to be >= endsize

else continue the whole loop

{

born = currentPopulation/3

died = currentPopulation/4

currentPopulation = currentPopulation + born – died

}