## Write algorithm for Lab1 here.

## Remember to follow the rules of what makes a good algorithm from Notes #2.

Algorithm

1. Prompt user to enter birth rate per second. “How many seconds between births?”
2. Prompt user to enter death rate per second. “How many seconds between deaths?”
3. Prompt user to enter migration rate per second. “How many seconds between immigration?”
4. Prompt user to enter current population. “What is the current population?”
5. Prompt user to enter how many years in the future. “How many years in the future?”
6. Store variable “seconds\_per\_year” as the value 31536000 which represents the number of seconds per year.
7. Calculate the future population using: ( (seconds per year / birth rate) + (seconds per year / immigration rate) – (seconds per year / death rate)) \* the number of years ) + current population
8. Output the new population to the user. “The new population is…”
9. Check if the future population > current population
   1. If true, output to user “The population has increased.”
10. Otherwise, if the future population < current population
    1. If true, output to user “The population has decreased”
11. Otherwise, output to the user “The population has stayed the same.”