## Write algorithm for Lab1 here.

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

Algorithm

# This program solves for the future population of country and sees if it will increase or decrease over time

1. Prompt user to input how many seconds between birth (‘Enter seconds between births: ‘) store under sec\_birth

1. Prompt user to input how many seconds between death (‘Enter seconds between deaths: ‘) store under sec\_death

1. Prompt user to input how many seconds between immigration (‘Enter seconds between immigration: ‘) store under sec\_immigration

1. Prompt user to input the current population of the country (‘Enter current population: ‘) store under current\_population

1. Prompt user to input how many years in the future (‘Enter years in the future: ‘)

1. Calculate the change in population using the formula

(((31536000 / sec\_birth) + (31536000 / sec\_immigration) – (31536000 / sec\_death )) \* year)

Store under change\_in\_population

1. Calculate the new population using the formula

current\_population + change\_in\_population

store under New\_population

1. Output the result to the user (‘Your population will be: ‘ New\_population)

1. Calculate if the population increased or decreased using the condition
2. If current\_population < New\_population, output to user (‘The population increased’)
3. Otherwise output to user (‘The population decreased’)