

CS410 INTRODUCTION TO COMP SCI APPLIC

Assignment 7 – Loops

Write two separate programs. You must use a while loop in each one.

1. **Ant:** A certain insect colony contains 6.356 million ants in 2021 and is set to lose 0.6% ants every year. Write a program that prints the year and population (in millions to 3 decimal places) **every** year from 2021 to the first year when the population is under 6 million. This program has no input.
2. **SumSquares:** Write a program to input an even positive integer, n , and then calculate and print the sum $2^2 + 4^2 + 6^2 + 8^2 + \dots + n^2$. Your program should use a loop to perform validation on n when it is input.

Test Data

Ant: no input

SumSquares: Enter (one run of the program): 9 -3 -8 0 28

Turning in the Assignment

When you have finished, run your programs using the test data above and take screenshots. Upload the screenshots, the two java files and the two class files using the two separate links on Canvas.

Due Date: start of class on 3/3