

CS 105

Exam 2 Topics/Review

Topics:

1. For loops
2. While loops
3. Strings
4. Functions
 - a. Parameters (inputs)
 - b. Return values (outputs)
 - i. Multiple output values

Skills:

1. Write pseudocode
2. Convert pseudocode to Matlab code
3. Write and use custom functions
4. Trace algorithms/code for a given input
5. Solve a problem by writing a program
6. Parsing Strings

Example Problems:

1. Sum an array
 - a. for loop
2. Compute the mean and standard deviation of an array
 - a. for loop
3. Sequential Search
 - a. for loop
4. Selection or Bubble Sort
 - a. Double for loop
5. Print Squares of Even ints
 - a. for loop
6. Calculate $n!$
 - a. for loop (with if cases)
7. From user input, compute algebraic and geometric means
 - a. while loop