**15-104 Introduction to Computing for Creative Practice – FALL 2023**

NAME: ENTER YOUR NAME HERE

ANDREW IS: ENTER YOUR ANDREW ID HERE

SECTION: ENTER YOUR SECTION LETTER HERE (A-E)

**CONCEPTS QUESTIONS 2**

Enter your answers to each of these questions in the space provided. Do not use online tools (including AI tools). Do not consult with other students when answering these questions. The information you fill in should be your work and only your work.

1. What is the value of x after the following sequence of instructions is executed in its entirety? Enter a single number as your answer.

var x = 1;  
x = x + x;  
x = x \* x;  
x = x \* x;  
x = x + x;

YOUR ANSWER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Consider the value of **y** in the following statement:

y = 12345 % \_\_\_\_\_;

What value must go in the blank so that y is set to the number 345?

YOUR ANSWER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The following sketch does not run. What is the reason?

function setup() {  
 var x = 100;  
 var y = 300;  
 createCanvas(400, 400);  
}  
  
function draw() {  
 background(200);  
 ellipse(x, y, 50, 500);  
}

YOUR ANSWER:

1. Consider the following **draw** function where **x** is initialized to 0 (not shown):

function draw() {  
 background(200);  
   fill(255, 0, 255); // magenta  
 circle(x % width, height / 2, 25);  
 x += 1;  
 }

Describe the motion of the circle on the canvas including what happens when it reaches the edge.   
  
YOUR ANSWER: