

Midterm Exam: Practical Component
COMP 125: Visual Information Processing

For this exam, log in to P5's website, and open an editor.

You will make a total of four programs for this exam. You should save each one *individually* and submit it to Sakai under the posted "Midterm-Practical" section - please do so by attaching the third-down "share" link to your saved programs.

This exam is individual, so you may not collaborate with neighbors either virtually or in-person. However, you may use your own notes, prior labs, and you may look things up online. I recommend using P5's documentation.

This exam is *not* closed-internet, but it *is* closed-AI. You may not use any AI agent to assist with this work. I recommend heavily against searching for solutions directly online, as you are likely to stumble into AI-driven answers. If this is detected, it will be considered academic dishonesty and net a zero for all three parts of the midterm exam.

Please also remember - partial credit is given! Just get as far as you can with each part.

1. 5 pts:
 - a. Put in a comment at the top of the file your LUC username and "Problem 1"
 - b. Store three variables: your name, your favorite number, and your favorite food
 - c. Print these three variables to the console
 - d. Breakdown:
 - i. string
 - ii. number
 - iii. string
 - iv. print each
 - v. runs without breaking
2. 5 pts:
 - a. Put in a comment at the top of the file your LUC username and "Problem 2"
 - b. Put three circles on the canvas. Ensure they do not touch. Set them to different colors.
 - c. breakdown:
 - i. circle 1
 - ii. circle 2
 - iii. circle 3
 - iv. colors, not touching
 - v. runs without breaking
3. 10 pts:
 - a. Put in a comment at the top of the file your LUC username and "Problem 3"
 - b. Use a for loop to place 5 circles on the canvas. Ensure they do not touch. Set them to different colors.
 - c. breakdown:
 - i. for loop

- ii. one point for each circle
- iii. different colors
- iv. not touching
- v. runs without breaking

4. 10 pts:

- a. Put in a comment at the top of the file your LUC username and "Problem 4"
- b. Create an input box.
- c. Store the value from the input box in a variable called "value"
- d. Make sure "value" is between zero and ten. If "value" is less than zero, set it to zero. If "value" is greater than ten, set it to ten.
- e. Place the number stored in "value" to the canvas
- f. breakdown:
 - i. input box made 2 pts
 - ii. stored value in "value" (draw loop) 2 pts
 - iii. use if/elif to set lower bound of value 2 pts
 - iv. use if/elif to set upper bound of value 2 pts
 - v. use "text" to put the number in the canvas somewhere 1 pt
 - vi. runs 1 pt