This is a list of topics that may be included in Exam 3. This list is not exhaustive and is only intended to help you review.

**Preparing for the exam:**

1. *Study examples and activities.* Make sure you understand every examples and in-class activities.

2. *Read Python programs.* Try the programs from the lectures slides. For each program, go through each instruction and find the expected output. Next, run the same program on your computer and compare the output to your expected output. If there is a match, then you understand the program.

3. *Writing Python programs.* Pick some of the programs that we discussed during the lecture. Write a different solution for the problem. Remember, there is no one way to solve a problem.

4. *Study the lab problems.* Make sure you understand the lab problems and your solutions to the problem.
1 Topics

1. Randomness

2. Functions
   a) Built-in functions, methods, and user-defined functions
   b) Variables scope: local vs global variables

3. Simulation
   a) Probability of events

4. Files
   a) Files modes
   b) Files I/O methods
   c) Exception handling

5. Visualization
   a) Plotting charts