

# Warmup

- Pretend you are a secret agent and are captured by the evil **Dr. Phil**.
- Dr. Phil likes to play the following game with his prisoners: he picks random numbers from 1 to 100 over and over again. But he always makes sure that *every number he picks is bigger than the previous number*. Eventually, Dr. Phil picks 100, and that's when the secret agent will meet his or her end.
- Write a program to simulate this. (*Hint: Use the sliding window technique to remember the random number generated from the time before. Use this number to generate the next one.*) At the end of the simulation (when you generate 100), stop the loop and print the total number of numbers generated. Run this a few times. What is the longest amount of time you can stay alive?
- Hint to get started: write a program to generate random numbers between 1 and 100. Print each one out as they are generated. Stop when you generate 100. Then add in the sliding window technique.

