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1. Create a task that sleeps for a random amount of time between 1 and 10 seconds, then displays its sleep time and exits.

2. Create a task that produces a sequence of n Fibonacci numbers, where n is provided to the constructor of the task. Create a number of these tasks and drive those using threads. (Note: use join( ) method of Thread class)

3. Implement three classes: Storage, Counter, and Printer. The Storage class should store an integer. The Counter class should create a thread that starts counting from 0 (0, 1, 2, 3 ...) and stores each value in the Storage class. The Printer class should create a thread that keeps reading the value in the Storage class and printing it. Write a program that creates an instance of the Storage class and sets up a Counter and a Printer object to operate on it. Modify the program from the previous exercise to ensure that each number is printed exactly once, by adding suitable synchronization.