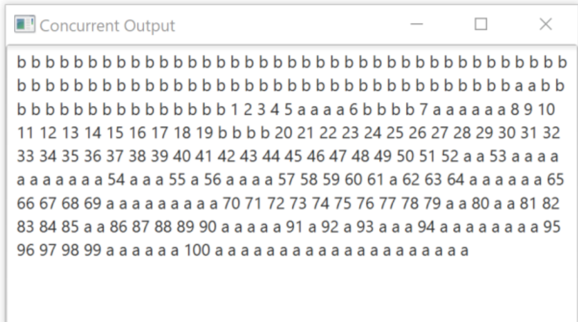
Workshop#9

Q1) Rewrite TaskThreadDemo.java to display the output in a text area, as shown below.



Q2) Write a program that launches 1,000 threads. Each thread adds **1** to a variable **sum** that initially is **0**. Define an **Integer** wrapper object to hold **sum**. Run the program with and without synchronization to see its effect.

Q3) The iterator is *fail-fast*. Write a program to demonstrate it by creating two threads that concurrently access and modify a set. The first thread creates a hash set filled with numbers and adds a new number to the set every second. The second thread obtains an iterator for the set and traverses the set back and forth through the iterator every second. You will receive a **ConcurrentModificationException** because the underlying set is being modified in the first thread while the set in the second thread is being traversed.

Q4) Using synchronization, correct the problem in the preceding exercise so that the second thread does not throw a **ConcurrentModificationException**.