SPOT Questions

1. Write a Java program for the following scenario.
   A computer laboratory has a single printer shared by multiple users. Several users may send print requests simultaneously. The printer can process only one print request at a time. Use multithreading and synchronization to ensure that only one user accesses the printer at a time and that the print jobs are completed without interference.

2. Write a Java program where multiple threads perform fund transfers between bank accounts simultaneously. Use synchronization to ensure that the balance of each account remains consistent and that money is neither lost nor duplicated during concurrent transfers.