

Ojashwi College
BCA – 3rd Semester
OOP in Java

Lab 6: Threads and IO/Stream

1. Create two class ThreadCapital and ThreadSmall that implements Runnable. ThreadCapital prints character 'A' to 'Z' after random interval and ThreadSmall prints 'a' to 'z' after random interval. Run these threads so that they operate concurrently.
2. Write a program that tries to pop an item from empty stack. It waits until an item is pushed into the stack. Use concept of wait() and notify().
3. Write a program that demonstrate the concept of deadlock.
4. Write a program that read a file a1.txt and write the content to b1.txt by using either byte stream or character stream.
5. Write a class called Student that has field id, name and email. Write a program to write the objects of Students to a file and read them. (Apply concept of Serialization and use FileInputStream and FileOutputStream).