Parallel and Distributed Computing
Laboratory 1
Introduction to Threads

Questions

1. In the programs `HelloThreads.java` and `HelloThreadsArgs.java` we can avoid using a data structure for the threads, that is, simply create threads and start them. What effect would this have on the `join` call?

2. Write code where `main()` creates two threads, but each one belongs to a different class. For example, one class may have a different constructor or a different `run()` method. You may use inheritance and polymorphism if you wish.

3. Extend the code from question 2 so that 10 threads are created from each of the two classes.

4. Write a program that creates 10 threads. Thread `thread[i]`, where `i = 0, 2, ..9`, calculates and prints the first 20 multiples of `i + 1 = 1, 2, ..10` (respectively).
   For example, thread 2 calculates and prints:

```
1 * 3 = 3
2 * 3 = 6
3 * 3 = 9
.....
```

The outputs occur simultaneously, not sequentially. What do you observe if you isolate the prints of a single thread? What do you observe when all threads print simultaneously