Day 8 - Core Java / MULTI THREADING AND PARALLEL COMPUTE

Topics:

- Concurrency API For java
- Executors Framework
- Lambda and threads
- Futures and Callable , Completable

Assignments:

- 1. The main method waits to get input from the users until it is terminated. The input that it receives is any string. As soon as the main method receives the input it delegates the assignment of creating a password to a thread. The thread generates a random number and appends this number to the string that is passed and displays the password. Write a java program to do this.
- 2. Implement the previous exercise using Runnable.
- 3. A prompt asking a question appears for which user is given 1 minute. If user answers the question before 1 minute then "Congratulations!" is displayed. Otherwise "Better Luck Next Time" is displayed.
- 4. Write a program to implement the above scenario.
- 5. Write a bank class that has an array of account objects. The method transfer allows transfer of money from one account to another account. Using the hints to avoid deadlocks from the previous slide implement the transfer method. Test the application by creating two threads that simultaneously transfers money from accounts 11111111 to account 22222222 and vice versa.