

Object-Oriented Programming Lab, Lab#10, Spring 20

Today's Topics

- Input / Output
- String manipulation
- Thread

Problems/Assignments

- 1) a) A text file named **olympic.txt** contains information of all countries participating in the Rio Olympic 2016. Each line in the file starts with the name of the country followed by the number of **gold, silver and bronze** medals won by the country. Write a Java program that reads the file and writes the content of this file into another file named **processed.txt**. A sample file looks as following.

USA 46 37 38
UK 27 23 17
China 26 18 26
Russia 19 18 19
Germany 17 10 15

- b) Now, you have to write another Java program that reads the same file **olympic.txt** and writes into **processed.txt**, but this time it also calculates the total number of medals (summation of gold, silver and bronze medals) in each line in addition to the information read.
- 2) a) Create a multi-threaded application with 2 threads; one thread will print all even numbers up to 100 whereas the other will print all odd numbers.
- b) (Advance) Now modify the code in such a way so that the output of the threads become sequential i.e. output become 1,2,3,4,5, ... ,98,99,100
- 3) Create a multi-threaded application with 3 threads where each thread will generate 10 random numbers. In Main thread, calculate the summation and average of these 30 numbers generated by 3 threads.