## **CPU Simulator:**

First, I used the bubble sort to sort the task list., then by using a loop I ran a thread on each task on the list. Running a task in this example is sleeping as long as the given amount.

## Find Multiples:

I defined a "Mul" class which implements runnable, the run methods adds every multiple of a given number in a given range to muls (an attribute of Mul which is an array list), the I defined 3 threads for each of the numbers 3, 5 and 7 and I used the join() command to start them. I combined 3 array lists of multiples and removed repetitive numbers using "removeDuplicates" and then I calculated its sum.

## **Use Interrupts:**

I started a sleep thread with sleep counter 5 (which means it will run for 5 minutes), and then started a loop thread with value of 3 (which means it will enter a never ending loop) and in both cases I put the main thread in sleep for 3 seconds before checking if they are still alive, if they were, then I used the interrupt command on them