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CO322- Lab1

In python and java, when the problem size is small, the rum time of two implementations (recursive and iteration methods) is almost likely to zero. Therefore when the problem is small there is no difference in the runtime between the two implementations.

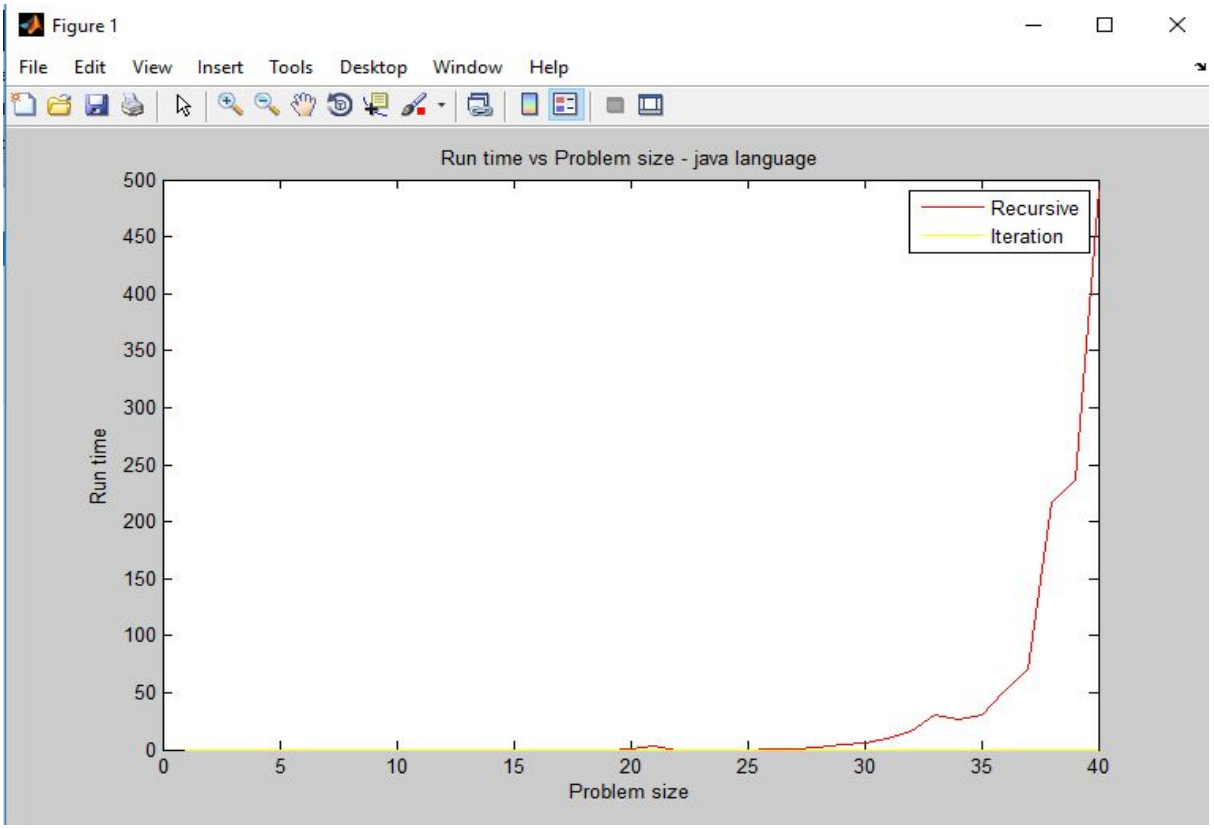
In python the run time is more larger than the run time in java, when the problem size is large (x>27) in recursion method. But there is no clear in run time difference between the two languages in the iterating method because in both the run time are closed to zero there.
But considering the recursive method we can see a clear difference of run times between the two languages.

In recursive method ,in both cases the run-time begins to change after the problem size is larger than 27.But in iteration method, the incrementation of run time when the problem size increases is more large than java. So in both languages, the way of the run-time changes is similar way.But the amount of change is more different in two languages.

Because when the problem is small both algorithms are useful because runtime of both of them is very small. So when the problem is small both the methods are high in its efficiency. So both algorithms are useful when problem size is small.

Because when the problem is large the the runtime of the recursion method becomes very large. Due to the large runtime, recursion method is not much efficient. It is not a good thing. Therefore even though we can use the fib_r but since it is not efficient, fib_r is not useful when the problem is large.

Java plottings for two implementations



Python plottings for two implementations