

There is no big difference in the run-time between two implementations in both java and python languages. It nearly gives the run-time as zero.

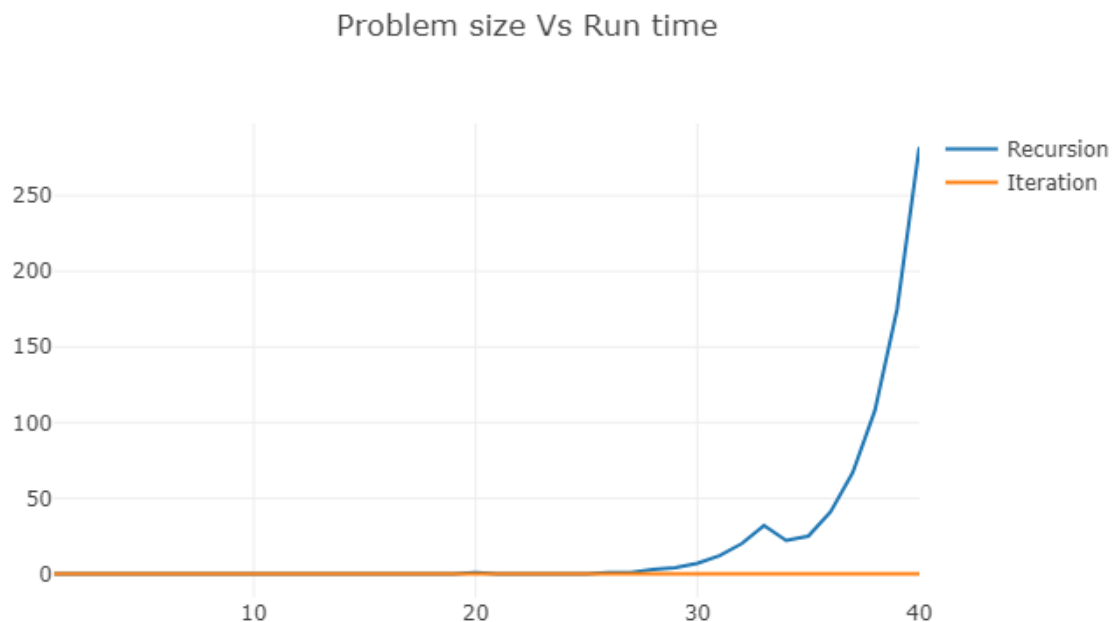
There is a larger difference in recursive method of both languages. The run-time of recursion method in python gets larger than the run-time of recursion in java. But there is no big difference in iteration method in both languages. It is almost zero in both languages.

In recursion method of python language run-time changes almost after the problem size gets larger than 30. Same implementation in java, run-time changes almost after the problem size gets larger than 30. But when comparing way the run-time changes in the two languages in recursive method, increment of run-time in python is larger than in java. In iteration method of both languages, the way the run-time changes do not differ largely.

If the problem is small both algorithms are useful. When the problem becomes small, run-time of both languages in both implementations are almost similar. When the problem is small both algorithms are efficient. So both are useful when the problem size is small. Otherwise when the problem size becomes large in size, they get larger run-times.

If the problem is large fib_r is not useful. When the problem size is large run-time of recursion method is very large in both languages. So the recursion method becomes less efficient. So If the problem is large fib_r is not useful .

Java plot



Python plot

Problem size Vs Run time

