

Name: Perman Atayev  
Student ID: 21701663  
Section: 02  
Project : 01

K = 4 is for mvt,.mvp.  
K = 5 for mv.

	mv	mvp	mvt
50	0.003671s	0.002282s	0.003044s
500	0.139410s	0.104097s	0.249684s
3000	5.098712s	5.064540s	7.228574s

I found that the slowest among three is mvt, which depends on threads. It doesn't make much of a sense, it might be because of the fact that I did not use the shared stack property of threads, and directly used **struct** to pass all required attributes when threads were created.

The fastest among all is mvp, which depends on pipes and processes. It does make sense that it is faster than mv, because it doesn't need to write and read into files as much as in mv.

I couldn't test for the larger input, because my IDE would crash if I was to generate  $10^8$  ( $10^4 * 10^4$ ) random numbers.

Test files that I used to test my programs are included in the testFiles folder.