

Seminar 3

HPC2021

A P R I L

caesar sipher

key = 3



encode: += key

D S U L O



decode: -= key

A P R I L

PROGRAM SPECIFICATION:

- * 0-process reads the text and breaks it into parts
- * for loop:
 - 0-process randomly chooses another process
 - 0-process sends part of the text to that process
 - the receiving process encodes/decodes
 - the receiving process writes the output to file

PLAN FOR THE SEMINAR:

- 1) write sequential version
- 2) decompose sequential version into functions
- 3) write the makefile
- 4) add mpi
- 5) rewrite mpi version into a class
- 6) change the class to suit the cellular automata hw

Parts of the program can be adapted to the parts of the hws:

Ping-pong hw:

- processor 'i' passes a ball to another guy 'j'
- only 'i' knows who will be next, others don't know and they always need to be on the lookout
- calculate the bandwidth

Cellular automata hw:

- draw the pictures of 3 interesting rule outputs
- calculate time