Operating Systems
Jacobs University Bremen
Dushan Terzikj

Course: CO20-320202
October 11, 2018

Problem Sheet 2

Problem 2.1

Solution:

For the program please check *main.c*. Compile it with *make*. To run type *./main [-p number of flips] [-n number of persons]*. To clean type *make clean*.

Results:

(P, N)	Global lock (ms)	Iteration lock (ms)	Coin lock (ms)
$(100, 10000)$	171.566	1692.638	10487.072
$(10, 10000)$	34.97	191.26	1041.19
$(100, 1000)$	15.95	179.5	1076.05
$(100, 100)$	30.271	46.017	93.032
$(100, 10)$	20.104	18.342	13.117
$(10, 10)$	3.337	2.543	3.384
$(300, 250)$	70.701	129.934	669.507
$(3000, 6000)$	1513.807	31374.272	200160.846
$(1000, 1000)$	173.734	1682.632	8658.794
$(7000, 500)$	636.362	5773.152	36777.087

The more threads there are, the slower the processes finish. It is also dependable on number of flips, but the number of persons (number of threads) have more precedence.