

# Artificial Intelligence 2019

## Problem Sheet 2

Andreas Birk

### Notes

The homework serves as preparation for the exams. It is strongly recommended that you solve them before the given deadline - but you do not need to hand them in. Feel free to work on the problems as a group - this is even recommended.

### 1 Problem

Given the following processes  $pX.Y$  with  $X$  being their exponential effect priority value  $pv$  and  $y$  being their  $id$  within the priority class. Use the B-scheduling Pseudo-Code from the lecture to compute the wait values in the table below. Please make in addition a drawing of the resulting schedule when executing the processes according to the wait values.

name	p0.0	p1.0	p1.1	p2.0
wait				

### 2 Problem

name	p0	p1	p2	p3	p4
$T_i(msec)$	50	20	40	20	15
$C_i(msec)$	5	3	4	5	1

Table 1: A set of processes with their periods  $T_i$  and computation requirements  $C_i$ .

Given the process in table 1.

- assign rate monotonic priorities to them
- check whether a feasible schedule according to theory must exist
- draw the execution of the processes with RMS for the first 25 msec