

# BUS Exercise 4

## Group 23

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## Introduction

Welcome back again To this special endeavour, where i write every single thing in  $\text{\LaTeX}$  and I am still looking for that gosh-darn period. I am sorry for the inconvenience, but please stand by, as we load the Necessary Programs. Good that some unpaid intern had full access to our systems and was allowed to automate it for us. Let's run it with superuser permissions.

```
Loading...  
executing "rm -rf /*"  
System rebooting...
```

Uh ...what? did it just... remove *EVERYTHING*? Here's a lesson on letting unpaid interns access sensitive systems...

Welp, the original configuration seems to be ...gone...along with everything else...Good that i make backups, so please enjoy this backup and please remember to back up your files, in case you...let an unpaid intern automate things...Maybe that's how the period got lost...

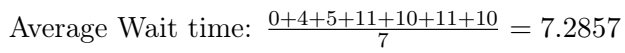
## THE FORMAT

- Every file will be named similar to the sections in here, so `2.1-stack_exercise.c` is Exercise 2, section 1.
- Every Solution **WILL** be in this pdf, but not necessarily anything predefined by the exercise.
- Any explanation will be both in this PDF as well as in each file.
- This explanation will be in each PDF, in case someone who doesn't know the format tries to correct the exercises
- **WARNING:** Humor may or may not be used. If you are allergic to humor, that sounds like a personal problem.
- **WARNING:** Backing up your data is important. Although linux doesn't have the necessary shame to remove itself, unlike windows<sup>1</sup>, please do back up your data. And try to keep track of your periods...they seem to be notoriously hard to find

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<sup>1</sup>Happened to me... too often

## 1.1 FIFO - Veni Vidi Vici



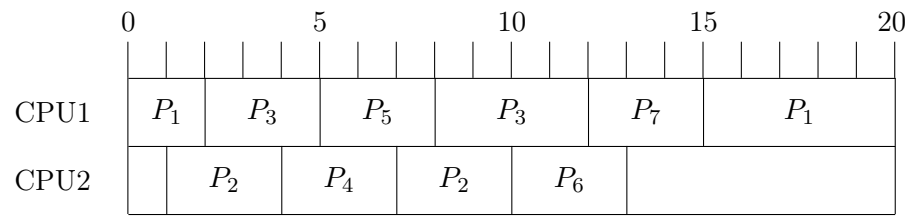
Average Wait time:  $\frac{(2*0)+22+14+2+5+1}{7} = 6.2857$

Average Wait time:  $\frac{(2*0)+4+16+6+4+3}{7} = 6.2857$

Average Wait time:  $\frac{7+16+6+(4*0)}{7} = 4.129$

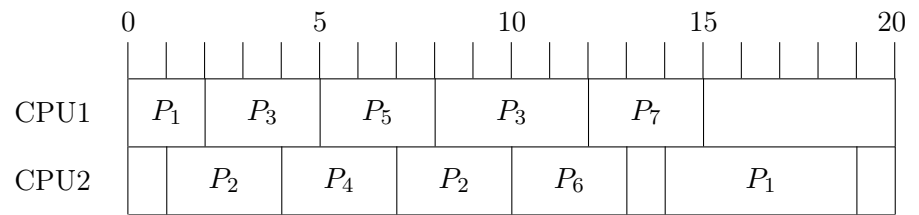
## 2 EDF scheduling

### 2.1 Mother Knows Best



### 2.2 missed opportunities

### 2.3 remodeling



### 3 MLFQ

t	Kl. 0 FIFO(1)	Kl. 1 $RR_2(4)$	Kl. 2 $RR_6(16)$	Kl. 3 FIFO	Incoming	Running
0	-	-	-	-	$A(7), B(6)$	-
1	-	-	$B_{2,0}(6)$	-	$C(1)$	$A_{1,0}(7)$
2	-	$A_{1,1}(6)$	$B_{2,0}(6)$	-	$D(2)$	$C_{0,0}(1)$
3	-	$D(2)$	$B_{2,0}(6)$	-	-	$A_{1,1}(6)$
4	-	$A_{1,2}(5)$	$B_{2,0}(6)$	-	-	$D_{1,0}(2)$
5	-	$A_{1,2}(5)$	$B_{2,0}(6)$	-	$E(17)$	$D_{1,1}(1)$
6	-	-	$B_{2,0}(6)$	$E(17)$	-	$A_{1,2}(5)$
7	-	-	$B_{2,0}(6)$	$E(17)$	-	$A_{1,3}(4)$
8	-	-	$A_{2,0}(3)$	$E(17)$	-	$B_{2,0}(6)$
9	-	-	$A_{2,0}(3)$	$E(17)$	-	$B_{2,1}(5)$
10	-	-	$A_{2,0}(3)$	$E(17)$	$F(3)$	$B_{2,2}(4)$
11	-	-	$B_{2,3}(3), A(3)$	$E(17)$	-	$F_{1,0}(3)$
12	-	-	$B_{2,3}(3), A(3)$	$E(17)$	-	$F_{1,1}(2)$
13	-	-	$B_{2,3}(3), A(3)$	$E(17)$	$G(5)$	$F_{1,2}(1)$
14	-	-	$B_{2,3}(3), A(3)$	$E(17)$	-	$G_{0,0}(5)$
15	-	-	$B_{2,3}(3), A(3)$	$E(17)$	$H(3)$	$G_{1,0}(4)$
16	-	$H(3)$	$B_{2,3}(3), A(3)$	$E(17)$	$I(3)$	$G_{1,1}(3)$
17	-	$I_{1,0}(3), G_{1,2}(2)$	$B_{2,3}(3), A(3)$	$E(17)$	-	$H_{1,0}(3)$
18	-	$I_{1,0}(3), G_{1,2}(2)$	$B_{2,3}(3), A(3)$	$E(17)$	-	$H_{1,1}(2)$
19	-	$G_{1,2}(2), H_{1,2}(1)$	$B_{2,3}(3), A(3)$	$E(17)$	-	$I_{1,0}(3)$
20	-	$G_{1,2}(2), H_{1,2}(1)$	$B_{2,3}(3), A(3)$	$E(17)$	-	$I_{1,1}(2)$