SHEET 11

1)a1). ./cnt

argc = 1

i = 1 , 1 < 1 => false

It doesn't enter the loop

0 children

a2) ./cnt 1

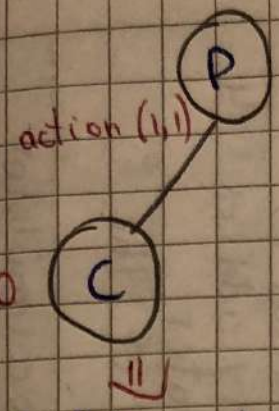
argc = 2

argv[0] = ./cnt

argv[1] = 1

i = 1 , 1 < 2 => true

It enters the for loop



P = parent

C = child

exit (0) ends this process

1 child

a3) ./cnt 2

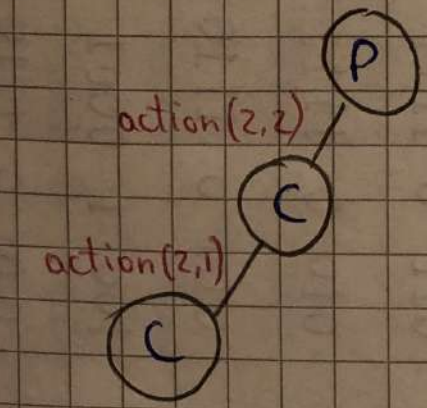
argc = 2

argv[0] = ./cnt

argv[1] = 2

i = 1, 1 < 2 ⇒ true

It enters the for loop



⇐⇒ The first child becomes the parent of the second child created

exist (0) ends the process

2 children

a 4) ./cnt 1 2 3

argc = 4

argv[0] = ./cnt

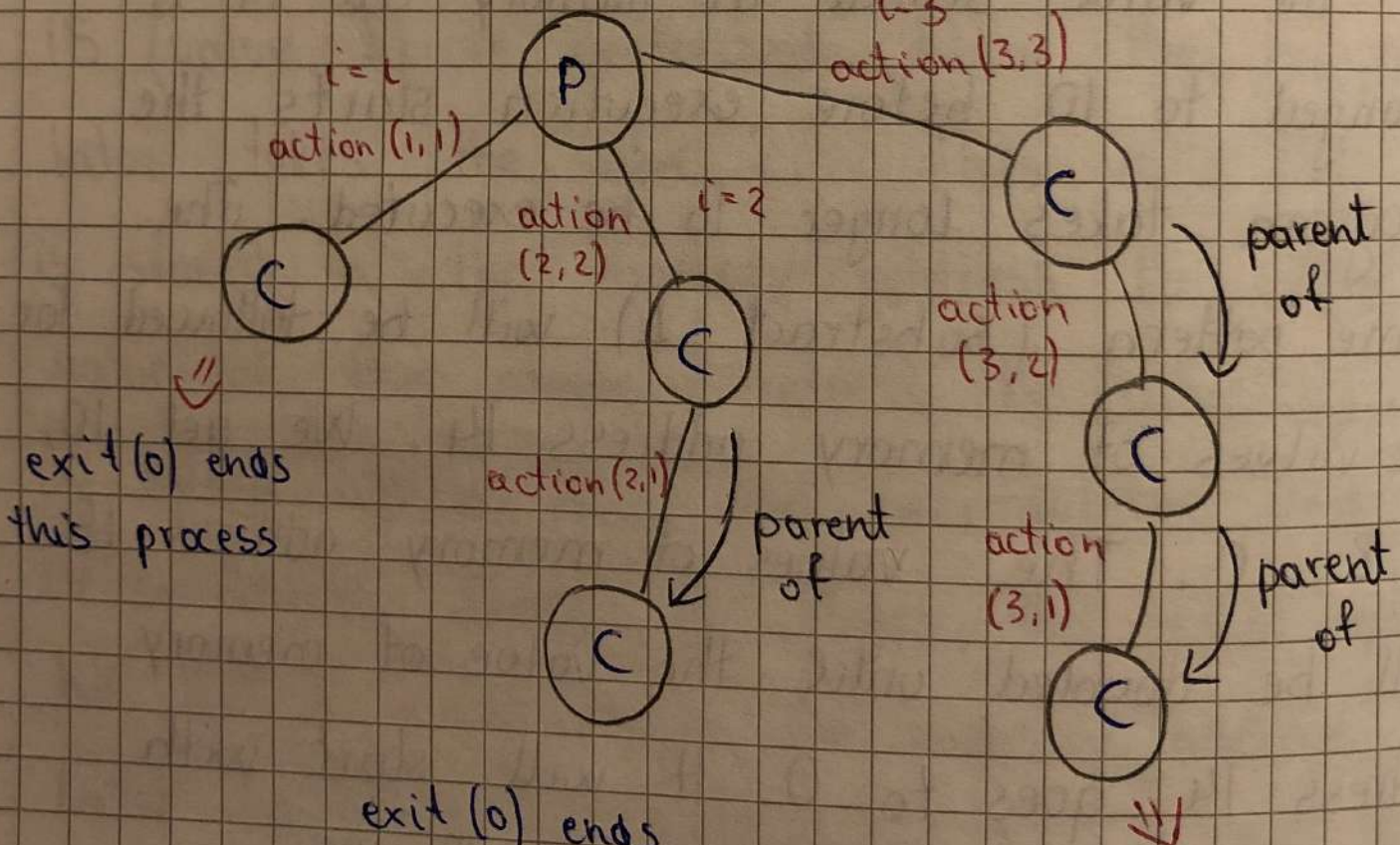
argv[1] = 1

argv[2] = 2

argv[3] = 3

i = 1 , 1 < 4 => true

It enters the for loop



6 children

b1) ./cnt 1

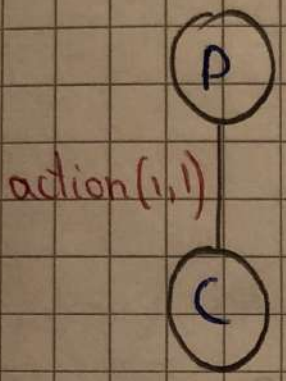
argc = 2

argv[0] = ./cnt

argv[1] = 1

i = 1 , 1 < 2 => true

It enters the for loop



If statement is not true anymore as now n=0, so the program stops its execution

Printed to the terminal : 1, 1

1, 0

1 child

b) 2) ./cnt 2

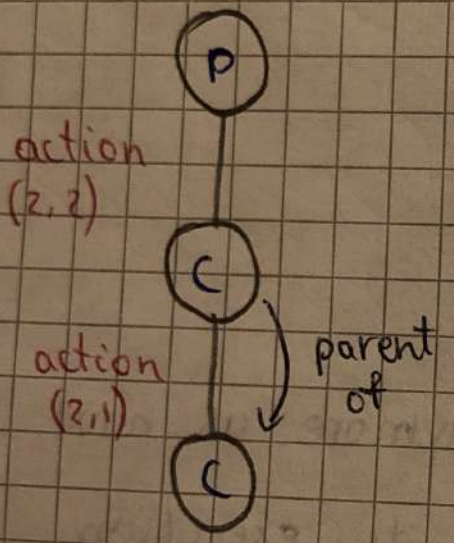
argc = 2

argv[0] = ./cnt

argv[1] = 2

i = 1 , 1 < 2 ⇒ true

It enters the for loop



Printed: 2,2

2,1

2,0

2 children

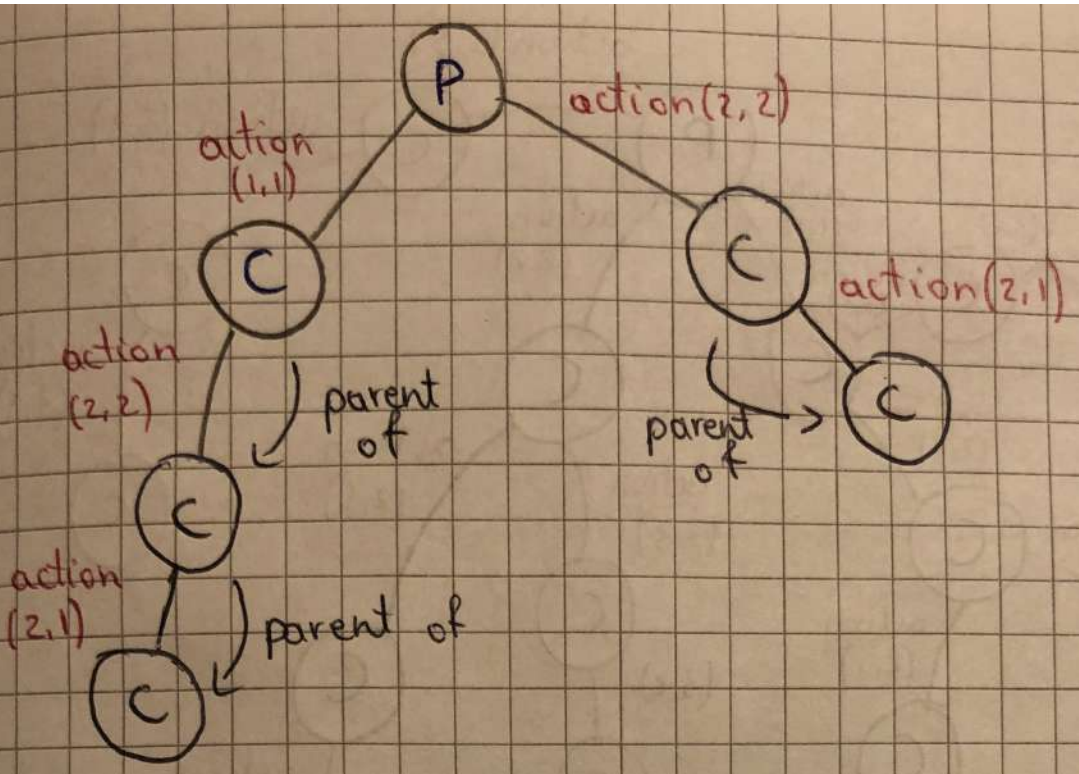
b 3) ./cnt 1 2

argc = 3

argv[0] = ./cnt

argv[1] = 1

argv[2] = 2



5 children

b 4) ./cnt 1 2 3

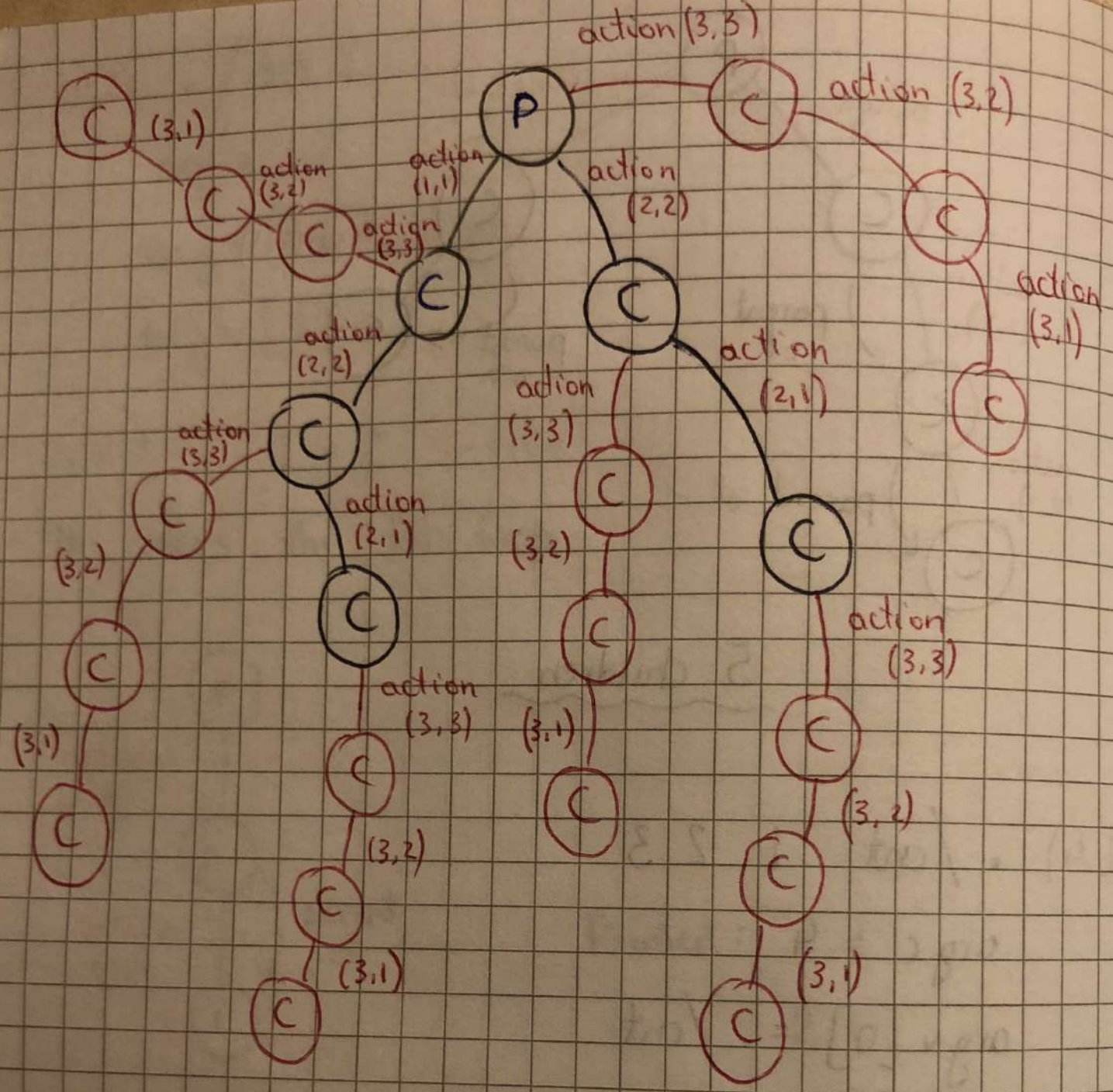
argc = 4

argv [0] = ./cnt

argv [1] = 1

argv [2] = 2

argv [3] = 3


P
action (1,1)
action (2,2)
action (3,3)
action (3,2)
action (3,1)
action (2,1)
action (3,3)
action (3,2)
action (2,2)
action (3,3)
action (2,1)
action (3,3)
(3,1)
(3,2)
(3,1)
(3,2)
(3,1)
(3,2)
(3,1)

23 children