## Atomic operations

process 1: I=I+2
process 2: I=I+3

scenario 1.		scenario 2.		scenario 3.	
I = 0					
read $I = 0$	read $I = 0$	read $I = 0$	$read\ \mathtt{I} = 0$	read $I = 0$	
do I = 2	do $I = 3$	do I = 2	$do \ \mathtt{I} = 3$	do $I = 2$	
write $I = 2$			write $I = 3$	write $I = 2$	
	write $I = 3$	write $I = 2$			$\text{read } \mathtt{I} = 2$
					$do \; {\scriptscriptstyle \mathbb{I}} = 5$
					write $I = 5$
I = 3		I = 2		I = 5	

Eijkhout: HPC intro