4 processes

load = 0.5

	P_nice	PUSER	estcpu	run	sleep	run
A	2	50	0	.1s	.6s	.2s
B	1	50	0	.3s	1.0s	.3s
C	3	50	0	1.0s	—	—
D	1	50	0	.5s	—	—

Calculating Priority

Prio = PUSER + (estcpu/4) + 2 * P_nice

A = 50+0+2(2) = 54
B = 50+0+2(1) = 52 ← smallest
C = 50+0+2(3) = 56
D = 50+0+2(1) = 52

- Each column is a quanta (.1s.)
- Cant run the same one twice
- decay every 10 quanta

	1	2	3	4	5	6	7	8	9	10
Process	B	D	B	D	B	D	A	D	C	D
New Priority	52.25	52.25	52.50	52.50	52.75	52.75	54.25	53	62.25	53.25
estcpu	1	1	2	2	3 (sleeping)	3	1 (sleeping)	4	1 (running)	5 (done)

1st decay Calculation : estcpu = (2*load)/(2*load+1) * estcpu + P_nice

C estcpu = (2 · 0.5)/(2 · 0.5 + 1) * 1 + 3 = 3.5
A estcpu = (2 · 0.5)/(2 · 0.5 + 1) * 1 + 2 = 2.5
B est cpu = (2 · 0.5)/(2 · 0.5 + 1) * 3 + 1 = 2.5

recalculate priority

A = 50 + (3.5/4) + 2(2) = 54.88
B = 50 + (2.5/4) + 2(1) = 52.63
C = 50 + (2.5/4) + 2(3) = 56.63
3 > 1 : B est = 4 + (2 · 0.5)/(2 · 0.5)' = 2.5

- B is smallest but still need to sleep for another (.5s)
- A still need to sleep for another (.3
- D is done
- so C has to go again
- B has new est because it sleep 1s or mor

Process	C	C	C	A	C	B	A	B	C	B
New Priority	57.13	57.38	57.63	54.50	57.88	52.63	54.75	5288	58.13	53.13
estcpu	4.5	5.5	6.5	2	7.5	2.5	3 (done)	3.5	8.5	4.5 (done)

2nd decay

C estcpu = (2 · 0.5)/(2 · 0.5 + 1) * 8.5 + 3 = 7.25
C = 50 + (7.25/4) + 2(3) = 57.81

Process	C	C	C	C
New Priority	58.06	58.31	58.56	58.81
estcpu	8.25	9.25	10.25	11.25 (done)