Schoduling Algorithms

Pricemptive

Non-preemptive

SRTF (shortest - FCFS (first conefirst serve)

Remaining time first)

- SJF (shortest job first)

LRTF (largest semaining time first)

- LJF (largest job first)

Round Robin - MRRN (Highest sexpense sation Next)

Pricerity based

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	programmes f residences f automatical and a second a second and a second a second and a second and a second and a second and a second a									
0	Concept to remember is scheduling:									
1)	Annival time: The time at which the process enters the ready queue									
2)	Burst time: Time require by a present to get executed on CPU.									
3)	Completion time: The time at which the process completes its execution.									
4)	Turn around time: Completion time - Arrival time									
5)	Waiting time: Turn coronal time - Burst time									
6	<u>Besponse time</u> : Time at which process — Aprival time gete the CPV first									
1)	FCFS (First Come First Some):									
	Paracoss Arrivaltime Buristtime C.T TAT WIT									
	P1 0 2 2 2 0 P2 1 2 4 3 1									
)	P3 5 3 8 3 0 P4 6 4 \$12 \$ \$2									
ant thord	P1 P2 P3 P4 P1 P2 P3 P4 P1 P2 P3 P4									
и ш ц	Ay TAT = 2+3+3+6 = 6-25 3.5									

AV9 WT=0+1+0+2 = 43250.75

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2)	SJF	Shortest	Job F	irst	<u>L</u>):			5) 15 CD	18
	53F co	n he pricem	ptive	as	well o	us No	v- broom	ptive	16
-	It it's F (Short	If it's preemptive is also called as SRTF (Shortest remaining time first)							
Ex:	Process Assival time PI 2 P2 5 P3 1 P4 0 P5 4 Gant chart: P4 P1 P 0 3 9 Aug.TAT: 9.8				6 2 8 3 4	2		14 0 7	
-)	_	T: 5.Z	1					+	7
2)	Process Pl	Assival time	Burst	time	8	TAT	UJ O		
	P2	3	3		13	10	7		(+
	P3	6	2		10	4	2		
	P4 P5	7	10		31	24.	14		0
	13		8		21	12	4		
	(Tout the	nt · _				£=57	5=27		Ê
	J. D.	19	23 P2	P	5 P4				
		018	(0	13	21	31			
	Aug TAT	: 11.4				7.00			

AND WT: 5.4

SPJT SRTF: (Showlest narraining time fine) - It is procomptive [Fx'1] Process Assival time Burut time (T) TA	y.)										
- It is proemptive)										
	It is proemptive										
EVILE IN TO STATE OF THE											
FXI Process Assival time Burest time CT TA	TUT										
PI 0 12 10 27 2	1 15										
- P2 2 4 6 4	0										
V P3 3 6 12 35	3										
P4 8 5 17 9	4										
Z= 4	9 5= 22										
0 2 3 9											
0 2 3 9											
Ready quene -											
0											
Gart chart: PI PZ P3 P4 PI											
0 2 6 12 17 27	0 2 6 12 17 27										
Avg. TAT = 12.25	Avo TAT = 12.25										
Avg $W.T = 5.5$											
	1										
2) Parouss Burstine Assivaltine C.T TAT	W.T										
VPI 85 2 15 13	17										
) rpz 2 5 7 2	0										
P3 8 1 23 22	14										
7 P4 3 0 3 3	0										
V PS 43 4 10 6	2										
E=46	E= 23										
Gant chart: P4 P1 P5 P2 P5 P1 P3											
0 3 4 5 7 10 15 23											
?											
AND TAT: 9.2											
	0										
Aug WT: 4.6											

Classmate

Date Page

Round Robin:

EXI:	Process	A.T	B.T	c. T	TAT	w.T	R.T
	Pl	0	5	13	13	8	0
	P2		3	١2	11	8	1
	P3	2	١	5	3	2	2
	PY	3	2	9	(4	(
	P5	4	3	14	10	7	9
1						-	

Consider Time quantum = 2

Ready queue: PIP2 P3 P1 P4 P5 P2 P1 P5

Gantlebart: P1 P2 P3 P1 P4 P5 P2 P1 P5

Avg TAT: 8.6

AUG WT: 5-8

Classmate Date

1							
82	Process	T.A	B.T	CT	TAT	W. T	R.T
	PI	5	5	32	27	2 2	10
	P2	4	6	27	23	17	5
	P3	3	7	33	30	23	3
	PY	1	9	30	29	20	0
	P5	2	2	6	4	2	2
	94	6	3	21	15	12	12

Consider Time quantum = 3

Ready Queue: P4 P5 P3 P2 P4 P1 P6 P3 P2 P4
[P1 P3]

Eart hart:

P4 P5 P3 P2 P4 P1 P6 P3 P2 P4 P1 P3
0 1 4 6 9 12 15 18 21 24 27 30 32 33

Aug TAT: 21.33

Ang W.T: 16

	Preempt	ve Prio	rity	School	ulin	g :					
			The construction of the co	nagoniedris (Digwilliage (Arrysin yers) 7 distalo	No. of the latest of the second		deployment was a second				
	Criféria: Priority mode: Preemptive										
	wage:	Leont	tive								
EXI:	Priority	Process	A.T.	B.T C.T TAT W.T R.T							
A LA	10	P	0	.54	12		1	0			
	20	P	1	43	8		3	0			
	- 30		2	20	4	2	0	0			
	V40	P4	4	1	5	1	0	0			
	Z= 22										
				1 - 1		Į.					
	Gart - PI	P2 P3 2 4	<u>P4 P2</u> 5	8 12							
					-						
	TAT EVA:	2.5								—(— (
Ex2:	Criteria		지							<u>'</u>	
	mode: 1		,	2							
				1 -		1		T		. 6	
	Paroress ID	Pro	iority	A	Ţ	B.T	C.T	TAT	W.T	•	
					H - 1	To per sup-	11				
	Pl		2 O) -	11	111	34	6	-	
	P2		3		5 Z	28	39	39	37	-	
	P3		<u> </u>		2_	10		47	27	é	
	P5		4		9	16	67	58	42	•	
	In this example, consider lesser the numeric value &										
	of priority higher the priority of process										
	Gart chart:									_	
				<u>, , , , , , , , , , , , , , , , , , , </u>	_	- 1				_(
			PZ Pa			5	Avg	: FAT	37.8 24.4	-(1	
		0 11	39	49	51	67	AK	j W.T:	24.9	_	
§										10	