

Green University of Bangladesh Department of Computer Science and Engineering (CSE)

Faculty of Sciences and Engineering Semester: (Fall, Year: 2024), B.Sc. in CSE (Day)

> KSA Assignment 02 Course Title: Operating System

Course Code: CSE 309 Section: 222_D5

Student Details

Name	Student ID
Meshak Abedin	201902151

[For Teachers use only: Don't Write Anything inside this box]

Lab Report Status	
Marks:	Signature:
Comments:	Date:

CSE-309 KSA TeSt-02

Ans to the are No 1

Applying Round Robin Algorithm with a time quantum of 5:

?	Applying	Round Ro	DIN ANDOUSEN
9 9 9	Time	process	Remaining Burst Time After Execution
9	0-5	P1	2°2
7	5-10	PC	
7 7 7	10-15	P5	1001 + 001 -670) 3000 milosono
7	15-20	P2	2
7	20-25	P3	2
₹ ₹	25.30	PH	Marco - (188) - anis Samonivari
7	30-35	P1	la Cian A
?	35-40	pe b	The Congress 10
3	40-45	P5	12 CONTINUE 10 CONTINUE STATE OF THE STATE O
₹ ₹	45-42	P3	o (completed)
\$	47-62	P2	TAT TO You'T have sout with 2233 min
ર 3 ર	52-58	Pu	
જુ જુ	58-62	P1,	(3) 2812 11
و خ	62-67	P6	5 A
3	67-68	PS	o (completed)
3		A series of the section of the secti	

Optnatiox Lomefloxacin INN 0.3% w/v

The state of the s	and the same and t		- 6
Time	Process	Remaining Burst Time After Execution	
68-72	P2	Oleompheted)	- 6
72-75	Py	o (completed)	9
75-80	PI	Active with Robert Brood Bright Driving	-
80-85	P6	O (Completed)	-
86-92	P1	o (completed)	

We 12 now,

Completion Time (CT) = The final time when the corresponding process completes execution

Turnarand Time (TAT) = completion Time Arrival Time

Waising Time (WT) = Turnaround Time - Burst Time.

* Dotoi.

Process	Arrival Time	Burst Time	et V	TAT	wt
P1	0	28	92	92	165
P2	3	14	72	69	156
P3	5	X	42	42	36
Pu	122601	10,13	75	68	55
P5	2	11	68	66	55
P6	1	20	85	84	64

NOW,

Average Wailing Time

65 + 55 + 35 + 55 + 55 + 64

=54.83

324634 42+68+66+84

Average Tunnanound Time:

Garl Chart:

P1 P6 P5 P2 P3 P4 P1 P6 P5 P3 P2 P4 P1 P6 P5 P3 P4 P2 P6 0 5 10 15 20 25 30 35 40 45 47 52 57 62 67 68 72 75 80 85 92

companison

MALINOBLA	Avg. Wailing Time	Average T.A.T	verdict
FEFS	38.5	53.83	Good
SJEWA	42.83	58.18	Beller
Round Robin	54.83	₹0.1₹	Best

From above discussion, it is imperative that Round Robin a) garithm provides best output for multitasking. While Shortest Job First provides on appropriate environment for predictable batch processors. First come first serve is more applicable in simple, non-interactive Lomefloxacin INN 0.3% w/v

see nonios.

Applying priorisy Scholling Algorishm (Non-Preempsive)

	88.11
Process	Remaining Process
P1	P3. P4, P5, P2, P6
P3	P4, P5, P2, P6
РЧ	P5, P2, P6
PG	Pa, Pb
Po	P6
P6	र्गिया भारत इ
	Р <u>1</u> Р 3 Р 4 Р <u>5</u>

We know,

Completion Time: When a process compretes enecution

Turnaround Time (TAT): Compression Time-Anival Time

Waising Time (NT): Turnaround Time =? purst Time was bring

promotion decorption it is importable that Rent o Robin shows pristratibling int. by the food 2 bevong mitting to successive successive and appropriate environments.

for predictable hater processors. I will come find serve

is more applicable in single, ixer interactive

Process	Arravaltime	Burlt Time	СТ	TAT	WT	
P1	0	2X	र्श्र	१र	O	
p ₃	5	X	34	29	22	11
PHI	\mathbf{Z}	13 26	42	8402/	22	2
P5	2	N. J. A.	58	56	45 9	A
P2	3	14 27	72	69	55	G
Pb	9 (1,0,0)	200	1 2 2 Lub	21	1714 B	Y079°
W (1)	feel for	ร์รู้อน.อณ	Charles of the second s	Committee of the Commit	1	Š,

Coart Chart:

1.12.12	1 1		and the same of th			
			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 Wiltersiai	449	4
12	13 P	1 15	P2 P6	6 -1-22		
0 2	R 34	48	58 72 92	nelo, 39/40	thogar	11
					di .	

* NOW,

Noted not 0+22+2X+45,+55+X1

mullisters private year old private them.

Average Waiting Time: 36.68

27+29+40+66+69+91

Average Turnanound Time=

: Not in Aman 4

Algorithm	griliam, gra	Time	Avg. Turnanoland Time		verdict
FEFS	38.50		53.83	d	Fain
SJF	42.83	SH.	58.17		C002
R.R. Z	54.83	80	7017	2	Best
P.S.	36.67	C	52.00		Bester

Among the four seneduling Algorithms, Round Robin is been due to it's fairness, nesponsiveness, and suitability for multitosking. Priority seneduling nanks better as it efficiently handles processes with vonying importance, although in it may cause stanvation. Importance, although in it may cause stanvation. Shortest Job First is good for batch systems as it primitizes the waiting time and turn around time. In this come first serve is the simplest but Lastly, first come first serve is the simplest but least efficient algorithm. It suffers from the convoy effect.

