

March

WEEK 11

January 2017

M	30	2	9	16	23
T	31	3	10	17	24
W		4	11	18	25
T		5	12	19	26
F		6	13	20	27
S		7	14	21	28
S	1	8	15	22	29

February 2017

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13 Monday 07/2/2017

Canberra Day (ACT-Aust) Labour Day (Vic-Aust)
Eight Hours Day (Tas-Aust) March Holiday** (Adelaide Cup) (SA-Aust) Anniv. Day* (Taranaki-NZ)

8.00 am

8.30

Process Scheduling

9.00

lecture from video lectures

9.30

What is Control Variable??

↳ main problem

10.00

if is the Science terminology??

10.30

Critical region

↳ where race condition is
arisen?

11.00

11.30

Process Scheduling??

Noon

↳ How to select the process??

↳ context switch

12.30

Process Behaviour

1.00

Short CPU Bursts

↳ How much time process

1.30

keep the CPU inside

↳ when the I/O comes
till time.

2.00

2.30

interactive program have short CPU
burst like talking I/O from user

3.00

CPU tell OS to take I/O
from user

3.30

Fib → don't need to I/O
until the result.

4.00

4.30

→ long CPU burst between I/O request

5.00

6.00 pm

March

WEEK 11

April 2017							May 2017							June 2017						
M	3	10	17	24	M	1	8	15	22	29	M	5	12	19	26					
T	4	11	18	25	T	2	9	16	23	30	T	6	13	20	27					
W	5	12	19	26	W	3	10	17	24	31	W	7	14	21	28					
T	6	13	20	27	T	4	11	18	25		T	1	8	15	22	29				
F	7	14	21	28	F	5	12	19	26		F	2	9	16	23	30				
S	8	15	22	29	S	6	13	20	27		S	3	10	17	24					
S	9	16	23	30	S	7	14	21	28		S	4	11	18	25					

073/292 Tuesday 14

8.00 am

8.30

9.00

9.30

10.00

10.30

11.00

11.30

Noon

12.30

1.00

1.30

2.00

2.30

3.00

3.30

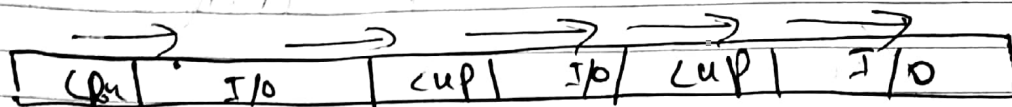
4.00

4.30

5.00

6.00 pm

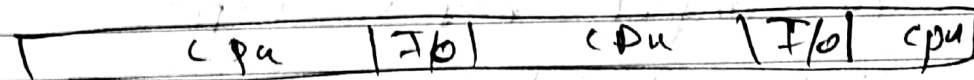
It means that long cpu burst like calculating does fit because no need to take input from user code itself recursive call then it will take long time



This diagram represent first we this program used small time cpu then wait for the I/O and also wait in the ready queue for Bhavi i.e wait karnay k liye is liye innay I/O cpu bound process k hety Hai

long cpu burst => k o cpu-bound process k hety Hai

Diagram



Process Scheduling

-> Maximise it cpu and Improve throughput

=> Some process run for long time we should to preempt for the other process

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S	5	12	19	26		

15 Wednesday 074/291

8.00 am

8.30

9.00

9.30

10.00

10.30

11.00

11.30

Noon

12.30

1.00

1.30

2.00

2.30

3.00

3.30

4.00

4.30

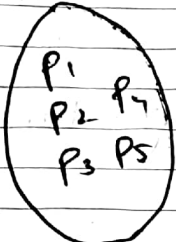
5.00

5.30

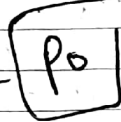
5.50

6.00 pm

Process Scheduler



Ready



Have main flow
we select flow
Scheduler select
process
Two things

There are two for the Process Scheduler

① Scheduling Algorithm

↳ decide "kis ki bhari ho ghi"

② Dis patches

↳ khesi Run Karne hai } context

when does the scheduler make decision? switch topic

↳ Pre-emption may be happen

↳ I/O complet may be happen

• Preemptive Scheduler vs

↳ also said Co-operative scheduler

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F	7	14	21	28	F	5	12	19	26		F	2	9	16	23		
S	1	8	15	22	S	6	13	20	27		S	3	10	17	24		
S	2	9	16	23	S	7	14	21	28		S	4	11	18	25		

March
WEEK 11

(175/250) Thursday 16

8.00 am

Scheduling Algorithm goals

8.30

Minimize Response time

↳ Click on the google chrome then immediately opened this is response between user and hardware.

9.30

initial response time window to kamm which is good things.

10.00

10.30 Minimize overhead

↳ FXP (gigantic Algorithm)

11.00

• Avoid starvation

11.30

↳ to keep front of High Priority Process

Noon

12.30

• Degradate gracefully

1.00

↳ conceptual
↳ Gracefull degradation

1.30

First come First serve

2.00

↳ diagram on slide

2.30

This is non preemptive

3.00

3.30

⇒ Non Preemptive

4.00

↳ if long cpu Burst comes then the beta Rty gher

4.30

5.00

6.00 pm

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17 Friday 076/289

St Patrick's Day (Rep of Ire.) St Patrick's Day (N Ireland-U.K.)

8.00 am

Round - Robin Scheduling

8.30

↳ Same f.c.f.s along with Preemption.

9.00

on slides

9.30

Shortest Remaining time first Scheduling

10.00

A 2 D 10 3 8

E D C B A

11.00

25 23 21 11 8

mean time = 17.6

11.30

10 8 3 2 2

C A B D E

Noon

25 15 7 4 2

mean time = 10.6

12.30

1.00

But we can't predict the time before running the program

1.30

2.00

Priority scheduling

Still seeing video is last 10 min

2.30

↳ is process to kithi priority dynai Hqr

3.00

Nice command in linux

3.30

4.00

Priority again

4.30

5.00

↳ we increase the priority by time by time

6.00 pm

Multi-level Queues

↳ gfs not good for us
because low priority process never
get to execute.

"Push Migration"