

Summarizing the findings of the analysis

Example :

..... Multilevel Queue Scheduling Algorithm Implementation

Priority Queues:

0 > RR

1 > SJF

2 > SJF

3 > FCFS

Enter the number of process : 4

Enter Priority and Burst time for each Process :

Process _1 >>>

Burst Time : 15

Priority : 0

Process _2 >>>

Burst Time : 40

Priority : 3

Process _3 >>>

Burst Time : 30

Priority : 2

Process _4 >>>

Burst Time : 25

Priority : 1

Firstly call RR() function, 0 15

P1

queue 0 →



burst time = 15

switch time = quantum time = 20

remain time = 15 → 0

remain time < quantum

switch time = 20 → 5

total time = 0 → 15

*** turnaround time = 15 || waiting time = 15-15 =0

Queue: 0

>> Process: 1 is finished

>> Remaining time : 5

>> Turnaround time :15

>> Waiting time :0

..... CPU EXECUTED TO NEXT QUEUE

Next call SJF() function, 15 35 (P4 remain 5)

P4

queue 1 →



P4 has smallest burst time, So P4 execute first

burst time = 25

remain time > switch time

remain time = 25 → 5

switch time = 20 → 0

total time = 15 +(20) → 35

..... Process not finished !

..... CPU EXEPCUTED TO NEXT QUEUE

** CPU does not go to FCFS() Function, because SJF queue 1 isn't empty.

So again P4 will execute.

15 35 40 (remain 5 include process run again)

remain time < switch time queue 1 →



remain time = 5 → 0

switch time = 20 → 15

total time = 35 + (5) → 40

*** turnaround time = 40 || waiting time = 35 Now queue become empty

Queue: 1 or 2

>> Process: 4 is finished

>> Remaining time : 15

>> Turnaround time : 40

>> Waiting time : 35

..... CPU EXECUTED TO NEXT QUEUE

CPU doesn't go to FCFS() because still queue 2 aren't empty

After Again Call SJF() Function,

P3

40 60 (P3 remain 10)

remain time < switch time queue 2 →



burst time = 30

switch time < remain time

remain time = 30 → 10

switch time = 20 → 0

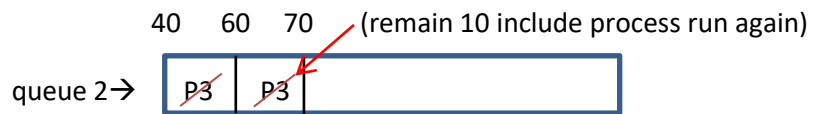
total time = 40 + (20) → 60

..... Process not finished !

..... CPU EXECUTED TO NEXT QUEUE

Again CPU will call SJF() as still it is unempty,

switch time < remain time



remain time = 10 → 0

switch time = 20 → 10

total time = 60 + (10) → 70

*** turnaround time = 70 || waiting time = 40 Now queue become empty

Queue: 1 or 2

>> Process: 3 is finished

>> Remaining time : 10

>> Turnaround time : 70

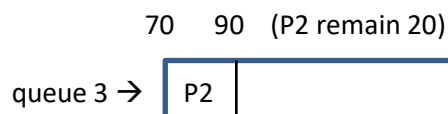
>> Waiting time : 40

..... CPU EXECUTED TO NEXT QUEUE

Then at last Call FCFS() Function,

P2

switch time < remain time



remain time = 40 → 20

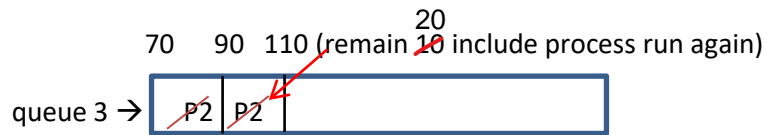
switch time = 20 → 0

total time = 70 + (20) → 90

..... CPU EXECUTED TO NEXT QUEUE

Again FCFS() Call,

switch time = remain time



remain time = 20 → 0

switch time = 20 → 0

total time = 90 + (20) → 110

*** turnaround time = 110 || waiting time = 110 - 4 = 70 Now queue become empty

Queue: 1 or 2

>> Process: 2 is finished

>> Remaining time : 0

>> Turnaround time : 110

>> Waiting time : 70

..... CPU EXECUTED TO NEXT QUEUE