

PRACTICAL: 04

Aim: Write a program to implement Shortest Job First (SJF) Preemptive Scheduling for three processes and calculate the total context switches and average waiting time. The processes have burst times 10ns, 20ns, and 30ns, arriving at 1ns, 2ns, and 6ns, respectively.

OUTPUT:

```
M ~

user@AnushkaGudadhe MSYS ~
$ nano SJF.c

user@AnushkaGudadhe MSYS ~
$ gcc SJF.c -o SJF

user@AnushkaGudadhe MSYS ~
$ ./SJF
Waiting Times:
P1 = 0 ns
P2 = 8 ns
P3 = 24 ns

Total Context Switches = 2
Average Waiting Time = 10.67 ns
```