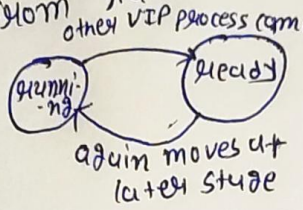
Ans (i)

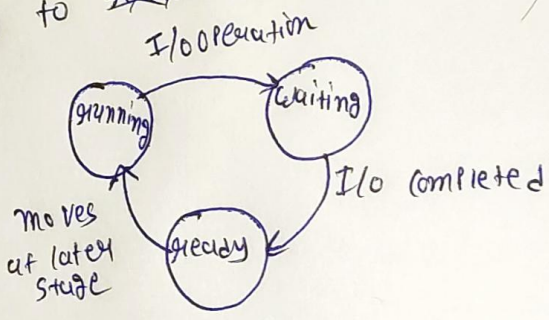
case-(i) when other process with higher priority comes

- In this case even if running process is not completed, it is moved from running state to ready state.



case-(ii) When running process wants to perform I/o operation

- In this case running process is first moved to waiting state to perform I/o there. Then when I/o is completed then it is moved to ~~[illegible]~~ ready state from waiting state.



* context-switch time:

- It is the time spent switching between two processes.
- one way to determine context switch time is to maintain time stamp of ending instruction of first process and starting instruction of second process then difference between them will be context swith time

= time stamp (P2-1) - time stamp (P1-x)
(x is last instruction by P1)

- Approx context switch time can be calculated in this way:-

$$T - \Sigma (\text{waiting time} + \text{execution time})$$

where T is total time of execution.