

# Quantum - samples

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## Concepts of GPOS

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Ready state → is like a waiting state.

Round Robin algorithm is used for scheduling the processes in cpu.

Stack is present address, Program counter is address of next instruction to be executed.

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### Deadlock process

If a process holds or locks any variable or memory or cpu or resource which are shared with others, and others wants to access that resource, Deadlock happens.

### Starvation

Daemon is a computer program that runs as a background process aka service.

It starts at boot time.

init() is daemon.

Docker is soul of system.

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**Copy on write** → OS creates a copy of a shared file if a process tries to write in that file.

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### Zombie and Orphan

#### Zombie

Child process dies before Parent process.

#### Orphan

Parent process dies before Child process.

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diot	14563	0.0	0.0	2644	92 pts/4	S	13:07	0:00	./zombie.out
diot	14564	0.0	0.0	2644	964 pts/4	S+	13:07	0:00	./orphan.out
diot	14565	0.0	0.0	0	0 pts/4	Z+	13:07	0:00	[orphan.out] <defunct>