Page No. :
Date :

Practical No - 4

* Aim: Implement process strategies : creation of child, zombie, orphan process.

* Learning objective:

To learn and understand the concept of process strategies such as creation of child, zombie, orphan process.

* Theory :

(i) Zombie Process :

A process which has finished the execution but still has entry in the process table to report to its parent process is known as a zombie process. A child process always first becomes a zombie before being removed from the process table. The parent process which reaps off the child process entry from the process table.

(ii) Orphan Process :

A process whose parent process no more exists i.e. either finished or terminated ~~is called an~~ without waiting for its child process to terminate is called an orphan process. In the following code, parent finishes execution and exits while the child process is still executing and is called as orphan process now. However, the orphan process is soon adopted by init process, once its parent process dies.

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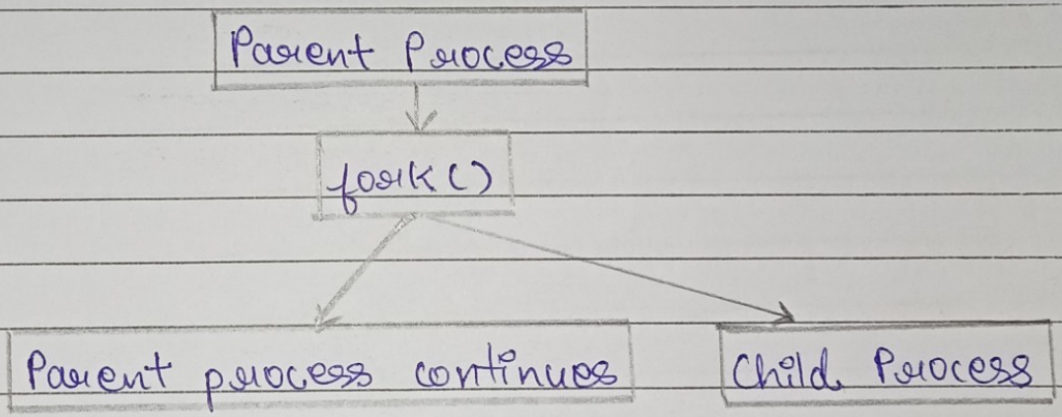
(iii) Child Process :

A Child Process is a process created by a parent process in operating system using a fork() system call. A child process may also be called a subprocess or a subtask.

A child process is created as its parent process's copy and inherits most of its attributes. If a child process has no parent process, it was created directly by the kernel. If a child process exits or is interrupted, then a SIGCHLD signal is send to the parent process.

A diagram that demonstrates parent and child process is given as follows -



* Conclusion :

We successfully learned and understood the concept of process strategies such as creation of child, zombie, orphan process.