

A process forks several
children with different
behaviors

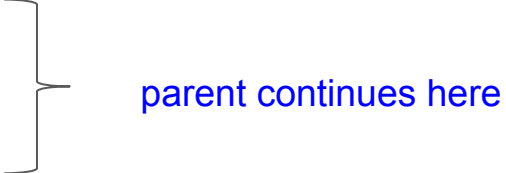
```
main ()
{
    cpid_1 = fork();
    if (cpid_1 == 0)
    { child_1's behavior defined here }

    cpid_2 = fork();
    if (cpid_2 == 0)
    { child_2's behavior defined here }

    cpid_3 = fork();
    if (cpid_3 == 0)
    { child_3's behavior defined here }

    doing_something_else();
    waitpid(cpid_1);
    waitpid(cpid_2);
    waitpid(cpid_3);
}

    }
```



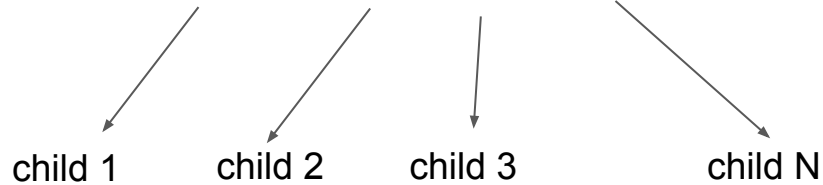
parent continues here

Auto IPC communication among children processes
due to inheritance of attached shared memory
segment

Children processes created by calls to fork inherit attached shared segments; they can detach the shared memory segments, if desired.

Step1: parent process allocates and attaches a shared segment

Step2: parent process forks a number of children processes



Children processes can communicate with each other due to inheritance of their parent's attached shared segment. They don't need explicit attachment.

Step3: parent process waits all children to exit, and then de-attaches the shared memory segment, and finally it deallocates the shared segment