

1. Create 5 children processes from a common parent and ensure that the parent terminates after cleaning all the terminated children using `waitpid()`. The `waitpid()` must be called after all the children are created and the parent has completed its work real work, if any. You must interpret the exit code of the cleaned-up processes, using `waitpid()`, in parent process – you must cover all the possible scenarios !!!
2. Create 5 processes but not from the common parent. Meaning, each child creates a new process. clean-up the children using `waitpid()`. `waitpid()` must be called after all the children are created and the parent has completed its work real work, if any. You must interpret the exit code of the cleaned-up processes, using `waitpid()`, in the parent process – you must cover all the possible scenarios !!!
3. Create a 5 child process from a common parent and launch different applications from the children processes - you may launch firefox, Gedit, and gcc - parent process must use `waitpid()` to collect the termination status of the child process - `waitpid()` must be called after all the children are created and the parent has completed its work real work, if any. You must interpret the exit code of the cleaned-up processes, using `waitpid()`, in the parent process – you must cover all the possible scenarios - meaning, terminate the children processes normally (successful/ unsuccessful) or abnormally !!!
4. Create 5 processes from a common parent and ensure that the parent terminates after cleaning all the terminated children using `waitpid()`. The `waitpid()` must be called after all the children are created and the parent has completed its work real work, if any; in addition, you must compile 5 different program files to in children processes to generate their respective object files ; the parent process must use `waitpid()` to collect the termination status of children processes – based on the exit code information generated by children processes, link all the object files to generate the final, linked program/application. In addition, the generated binary executable must be loaded in a new process, if the linking is successful