

Minishell Executor Checklist

This checklist outlines all the necessary steps to implement the executor for Minishell. It includes traversal of the AST, handling of pipes, redirections, builtins, and system calls.

- [] Receive `t_command_tree` root and minishell struct
- [] Check node type: `N_EXEC`, `N_PIPE`, `N_ANDIF`, `N_OR`
- [] For `N_EXEC`: setup redirections (infile/outfile)
- [] Check if command is a builtin
- [] If builtin: call `exec_builtin()` and update exit code
- [] If not builtin: fork process, setup FDs, call `execve()`
- [] For `N_PIPE`: create pipe, fork left and right child
- [] Close pipe FDs in parent after fork
- [] Wait for child processes and capture status
- [] For `N_ANDIF`: execute left, if success then execute right
- [] For `N_OR`: execute left, if failure then execute right
- [] Update minishell->exit_code with `WEXITSTATUS` or builtin return
- [] Restore original stdin and stdout after each command
- [] Free temporary redirections and process resources
- [] Optional: support for subshell execution and grouping

Use this checklist to ensure full and correct execution logic in Minishell.