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#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>

int main() {
    int X = 0; // Variable to be written by each process

    for (int i = 0; i < 3; i++) {
        pid_t pid = fork();
        if (pid < 0) {
            perror("Fork failed");
            exit(1);
        } else if (pid == 0) {
            // Child process
            X = i + 1; // Assign a value specific to this child
            printf("Child %d: X = %d\n", i + 1, X);
            exit(0); // Child terminates
        }
        // Parent continues to fork next child
    }

    // Parent process waits for each child
    for (int i = 0; i < 3; i++) {
        wait(NULL);
        X = 100 + i; // Parent's own value after each child's
termination
        printf("Parent after child %d: X = %d\n", i + 1, X);
    }

    // Parent writes its final value of X
    printf("Parent final X = %d\n", X);

    return 0;
}

```