Fork

#include <stdio.h>

#include <unistd.h>

int main() {

pid\_t pid;

// Print buffer index to observe what happens during fork

for (int i = 0; i < 5; i++) {

printf("Buffer Index: %d | PID: %d\n", i, getpid());

sleep(1); // Delay to make output readable

}

printf("\n--- Now calling fork() ---\n");

pid = fork();

if (pid == -1) {

perror("fork");

return 1;

} else if (pid == 0) {

// Child process

printf("After fork - Child Process ID: %d\n", getpid());

} else {

// Parent process

printf("After fork - Parent Process ID: %d\n", getpid());

}

return 0;

}