

Implement the C program in which the child process calculates the sum of odd numbers and the parent process calculate the sum of even numbers up to the number 'n'.

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

int main(int argc, char* argv[]) {
    int n;
    pid_t pid;
    int odd_sum = 0;
    int even_sum = 0;

    // Read the value of n from the command line
    if (argc < 2 || (n = atoi(argv[1])) < 0) {
        fprintf(stderr, "Usage: %s n\n", argv[0]);
        return 1;
    }

    // Create a child process
    pid = fork();

    if (pid == -1) {
        // Error occurred during fork()
        perror("fork");
        return 1;
    } else if (pid == 0) {
        // This is the child process
        // Calculate the sum of odd numbers
        for (int i = 1; i <= n; i += 2) {
            odd_sum += i;
        }
    }
```

```
    printf("Sum of odd numbers: %d\n", odd_sum);
} else {
    // This is the parent process
    // Calculate the sum of even numbers
    for (int i = 0; i <= n; i += 2) {
        even_sum += i;
    }

    printf("Sum of even numbers: %d\n", even_sum);
    wait(NULL); // Wait for the child process to finish
}

return 0;
}
```