Assignment#3

Task

Write a C program where the parent process sends several numbers to its two child processes using shared memory. The child processes receive these numbers, compute their sum, and then send the result back to the parent process through the same shared memory. Subsequently, the parent process displays the final sum.

For reliable communication, you must implement the bounded buffer (i.e., given in the textbook) on shared memory. You need to use the semaphore library for synchronization.

The numbers that are to be passed to the child processes must be passed to the parent process as command-line arguments.

Example:

$ ./a.out 1 2 3 4 5 6 7 8 9 0

Sum one is: 45