

## Inter Process Communication Readme

In this question of assignment, we need to use various mentioned ipc methods to communicate between two processes. 1 process need to generate 50 random strings of fixed size and store them into an array and then send 5 consecutive string along with indexes. 2<sup>nd</sup> process will send the maximum index of the array received as an acknowledgment. On successful receiving of acknowledgment, the sender again sends 5 consecutive strings and the process continues until all strings are sent successfully.

The technique used for generating Random string: Since the capital alphabets range starts from 65 we generate a random number between 0-25 and add it into 65 to get a character. After getting all the character strings is stored into an array.

For sending string, we just concatenated all 5 strings into 1 string (space separated in order) "Index1 String1 Index2 String2.....Index5 String5" and then transferred this string through various methods. For example, in shared memory, we already have a pointer, and we type cast pointer into char pointer and copy our string into this. In the receiver end, we copied the string. And then separated this concatenated string into an array of strings using the strtok function of Glibc. And then printed the element, index 1 by 1. Then maximum index received is copied into the shared memory pointer and transferred. Only the read-and-write method changes and the approach remain the same in all ipc processes.