AIM : 7B. Inter-process Communication using Shared Memory using System V. Application to demonstrate: Client and Server Programs in which server process creates a shared memory segment and writes the message to the shared memory segment. Client process reads the message from the shared memory segment and displays it to the screen.

//LAB 7B – Sever.c

```c
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/ipc.h>
#include <sys/shm.h>

#define SHM_KEY 1234 // Unique key for the shared memory segment

int main() {
        int shmid;
        char *shared_memory;
        char message[] = "Hello, client! This is the server.";

        // Create a shared memory segment
        shmid = shmget(SHM_KEY, 1024, IPC_CREAT | 0666);
        if (shmid == -1) {
                perror("shmget");
                exit(EXIT_FAILURE);
        }

        // Attach the shared memory segment
        shared_memory = (char *)shmat(shmid, NULL, 0);
        if (shared_memory == (char *)-1) {
                perror("shmat");
                exit(EXIT_FAILURE);
        }

        // Write message to shared memory
        strcpy(shared_memory, message);
        printf("Server: Message written to shared memory: %s\n", message);

        // Detach the shared memory segment
        shmdt(shared_memory);

        return 0;
}
```