

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 - Client.c
```

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

```
#define SHM_KEY 1234 // Same key as used by the server
```

```
int main() {
    int shmid;
    char *shared_memory;

    // Locate the shared memory segment
    shmid = shmget(SHM_KEY, 1024, 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);
    }

    // Read message from shared memory and display it
    printf("Client: Message read from shared memory: %s\n",
shared_memory);

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

    // Remove the shared memory segment
    shmctl(shmid, IPC_RMID, NULL);

    return 0;
}
```