Anu S

230701030

Ex.No.7: IPC using shared memory

Aim:

To write a C program to do Inter Process Communication (IPC) using shared memory between sender process and receiver process.

Code:

sender.c

#include <stdio.h>

#include <sys/ipc.h>

#include <sys/shm.h>

#include <string.h>

#include <unistd.h>

int main() {

int size = 1024;

key\_t key = ftok("shmfile", 65);

int shmid = shmget(key, size, 0666|IPC\_CREAT);

char \*str = (char\*) shmat(shmid, NULL, 0);

sprintf(str, "Hello from Sender Process!");

printf("Sender wrote to shared memory: %s\n", str);

sleep(10);

shmdt(str);

return 0;

}

receiver.c

#include <stdio.h>

#include <sys/ipc.h>

#include <sys/shm.h>

#include <unistd.h>

int main() {

int size = 1024;

key\_t key = ftok("shmfile", 65);

int shmid = shmget(key, size, 0666);

char \*str = (char\*) shmat(shmid, NULL, 0);

printf("Receiver read from shared memory: %s\n", str);

shmdt(str);

return 0;

}

OUTPUT:

./sender

Sender wrote to shared memory: Hello from Sender Process!

./receiver

Receiver read from shared memory: Hello from Sender Process!