Ex. No.: 7
Date: 02.04.2025   **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.

Program:

sender.c

```c
#include <stdio.h>
#include <sys/ipc.h>
#include <sys/shm.h>
#include <string.h>
#include <unistd.h>
int main(){
    key_t key=1234;
    int shmid=shmget(key,1024,0666|IPC_CREAT);
    char *str=(char*)shmat(shmid,(void*)0,0);
    sprintf(str,"Welcome to Shared Memory");
    sleep(5);
    shmdt(str);
    return 0;
}
```
receiver.c

```c
#include

<stdio.h>

#include <sys/ipc.h>
#include <sys/shm.h>
int main(){
    key_t key=1234;
    int shmid=shmget(key,1024,0666);
    char
    *str=(char*)shmat(shmid,(void*)0,0);
    printf("Message Received: %s\n",str);
    shmdt(str);
    return 0;
}
```

Output:
Terminal 1:
[root@localhost student]# gcc sender.c -o sender
[root@localhost student]# ./sender
Terminal 2:
[root@localhost student]# gcc receiver.c -o receiver
[root@localhost student]# ./receiver
Message Received: Welcome to Shared Memory
[root@localhost student]#

Result:

The program for Inter Process Communication using shared memory was executed successfully.

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