Ex. No. 7	IPC USING SHARED MEMORY
Date: 06.03.2025	

Aim:

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

Program:

sender.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

```
#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.