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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!
```