CODE >>

1:-

#include <stdio.h>

#include <sys/ipc.h>

#include <sys/shm.h>

#include <string.h>

int main() {

// ftok to generate unique key

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

// shmget returns an identifier in shmid

int shmid = shmget(key, 1024, 0666 | IPC\_CREAT);

// shmat to attach to shared memory

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

printf("Write Data : ");

fgets(str, 1024, stdin);

printf("Data written in memory: %s\n", str);

// detach from shared memory

shmdt(str);

return 0;

}

2:-

#include <stdio.h>

#include <sys/ipc.h>

#include <sys/shm.h>

#include <string.h>

int main() {

// ftok to generate unique key

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

// shmget returns an identifier in shmid

int shmid = shmget(key, 1024, 0666 | IPC\_CREAT);

// shmat to attach to shared memory

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

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

// detach from shared memory

shmdt(str);

// destroy the shared memory

shmctl(shmid, IPC\_RMID, NULL);

return 0;

}

OUTPUT >>

| Terminal 1 | Terminal 2 |
| --- | --- |
| pranav@pranav:~/OS/7B$ gcc u1.c  pranav@pranav:~/OS/7B$ ./a.out  Write Data : hello world  Data written in memory: hello world | pranav@pranav:~/OS/7B$ gcc u2.c  pranav@pranav:~/OS/7B$ ./a.out  Data read from memory: hello world |