# OPERATING SYSTEM - CS23431 EXP 7

**IPC USING SHARED MEMORY**

**NAME: KAAVIYA.R ROLL NO: 230701504 PROGRAM:**

## Sender.c:

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <sys/shm.h>

#include <string.h> int main() {

int shmid;

shmid = shmget((key\_t)2345, 1024, 0666 | IPC\_CREAT); if (shmid == -1) { perror("shmget failed"); exit(1);

}

printf("Key of the shared memory segment: %d\n", shmid);

char \*shmaddr = (char \*) shmat(shmid, NULL, 0); if (shmaddr == (char \*) -1) {

perror("shmat failed"); exit(1);

}

printf("Process is attached at address %p\n", shmaddr);

sprintf(shmaddr, "Hello world!!");

printf("Content written to shared memory: %s\n", shmaddr);

return 0;

}

## Receiver.c:

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <string.h>

#include <sys/shm.h> int main() {

int shmid; char \*shmaddr;

shmid = shmget((key\_t)2345, 1024, 0666); if (shmid == -1) {

perror("shmget failed"); exit(1);

}

printf("Key of the shared memory segment: %d\n", shmid); shmaddr = (char \*) shmat(shmid, NULL, 0);

if (shmaddr == (char \*) -1) { perror("shmat failed"); exit(1);

}

printf("Process is attached at address %p\n", shmaddr); printf("Data read from shared memory: %s\n", shmaddr);

return 0;

}

# OUTPUT:

