```c
#include "myinclude.h"



int main(){

pid_t fiu1,fiu2,fiu3;
int semid,shmid;
key_t key;
char * shmp;   //ide mentjuk osztott memoria szegmens kezdo cime
char * uzenet;
int * paros; //az osztott memoriaban levo valtozo
int * charnum;

key=ftok(".",33);

struct sembuf down0 = {0, -1, 0};
struct sembuf up0 = {0, 1, 0};
struct sembuf down1 = {1, -1, 0};
struct sembuf up1 = {1, 1, 0};
struct sembuf down2 = {2, -1, 0};
struct sembuf up2 = {2, 1, 0};

//lefoglalom a szemafor tombot 3db szemafor
if((semid=semget(key,3,IPC_CREAT|0660))<0)
        syserr("szemafor");

//lefoglalom az osztott memoriat 2 db int es 50 db char
if((shmid=shmget(key,2*sizeof(int)+50*sizeof(char),0660 | IPC_CREAT))
<0)
        syserr("memoria");

//felcsatolom az osztoott memoria kezdo cimet
shmp = (char *) shmat(shmid,NULL,0); //csatolom a memoria szegmenst
if(shmp==(void *)-1)
        syserr("shmat");
paros=(int*)shmp;
uzenet=shmp+sizeof(int);
charnum=(int *)shmp+sizeof(int)+(50*sizeof(char));

//beallitom a szemaforok kezdo erteket szem0=1 szem1=0 szem2=0
if(semctl(semid, 0, SETVAL, 1) == -1 || semctl(semid, 1, SETVAL, 0) ==
-1 ||semctl(semid, 2, SETVAL, 0) == -1)
        syserr("szemafor beallitas");

if((fiu1=fork())<0) syserr("fork hiba");

if(fiu1==0){
        //elso fiu lep be elsonek a kritkus szekcioba
        if(semop(semid,&down0,1)<0) syserr("semdown");

        printf("fiu1 apa: %d sajat: %d\n",getppid(),getpid());
        fgets(uzenet,50,stdin);

        if(semop(semid,&up1,1)<0) syserr("semup");
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        if(shmdt((void*)shmp)<0) syserr("shmdt");
        exit(0);
}
if((fiu2=fork())<0) syserr("fork hiba");

if(fiu2==0){
//masodik fiu az elso utan lep be a kritikus szekcioba
        if(semop(semid,&down1,1)<0) syserr("semdown");

        printf("fiu2 apa: %d sajat: %d\n",getppid(),getpid());
        *charnum=strlen(uzenet);
        if(*charnum % 2 == 0)
                *paros=1;
        else
                *paros=0;

        if(semop(semid,&up2,1)<0) syserr("semup");

        if(shmdt((void*)shmp)<0) syserr("shmdt");
        exit(0);
}
if((fiu3=fork())<0) syserr("fork hiba");

if(fiu3==0){
        //utolso fiu lep be utoljara
        if(semop(semid,&down2,1)<0) syserr("semdown");

        printf("fiu3 apa: %d sajat: %d\n",getppid(),getpid());
        if(*paros==1){
                printf("%s",uzenet);
                printf("%d\n",*charnum);
        }

        if(semop(semid,&up0,1)<0) syserr("semup");

        if(shmdt((void*)shmp)<0) syserr("shmdt");
        exit(0);
}
printf("apa apja: %d sajat: %d\n",getppid(),getpid());
wait(NULL);
wait(NULL);
wait(NULL);
if(shmdt((void*)shmp)<0) syserr("shmdt");
if(semctl(semid,0,IPC_RMID)<0) syserr("sem del");
if(shmctl(shmid,IPC_RMID,0)<0) syserr("ctl2");



exit(0);
}
```