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/*
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    33132 L9
    Title : Inter-process Communication using Shared Memory using System V
*/
```

FILE 1:

```
#include<stdio.h>
#include<unistd.h>
#include<sys/ipc.h>
#include<sys/shm.h>
#include<string.h>

int main()
{
    // ftok to generate unique key
    key_t key=ftok("a8",8);
    // 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);
    if (shmid == -1) {
        perror("Could not get shared memory");
    }
    printf("Enter Account Details(Name - Account balance): \n");
    gets(str);
    printf("Fine\n");
    //detach from shared memory
    shmdt(str);

    return 0;
}
```

FILE 2:

```
#include<stdio.h>
#include<unistd.h>
#include<sys/ipc.h>
#include<sys/shm.h>
#include<string.h>

int main()
{
    // ftok to generate unique key
    key_t key=ftok("a8",8);
    // 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);
```

```

int accBal=0,i=0,j=0;
char name[100],temp[100];

if (shmid == -1) {
    perror("Could not get shared memory");
    return 0;
}
while(str[i]!='-'){
    name[i]=str[i];
    i++;
}
name[i]='\0';
i++;
while(str[i]!='\0'){
    temp[j]=str[i];
    i++;
    j++;
}

sscanf(temp,"%d",&accBal);
printf("*****\n\t\
tAccount Holder Name :: %s \n\t\tAccount Balance    :: %d\
n*****\
n",name,accBal);

int ch;
do{
    printf("-----\n");
    printf("-----\n\t MENU\n-----\n1.Total Account
Balance \n2.Withdraw Amount \n3.Deposit Cash \n4.Exit \n\nEnter Choice : ");
    scanf("%d",&ch);
    switch (ch)
    {
    case 1: printf("\nTotal Balance : %d\n",accBal);
            break;

    case 2: printf("\nEnter Amount to Withdraw : ");
            int x=0;
            scanf("%d",&x);
            if(x<=accBal){
                accBal=accBal-x;
                printf("\nSuccessfully Withdrawl !!!!! \n\nAmount After Withdrawl : %d\n",accBal);
            }
            else{
                printf("\nAccount balance is low !!!!!\n");
            }
            break;

    case 3: printf("\nEnter Amount to Deposit : ");
            int y=0;
            scanf("%d",&y);

```

```
accBal=accBal+y;
printf("\nSuccessfully Deposited !!!!! \n\nAmount After Deposit : %d\n",accBal);
break;
```

default:

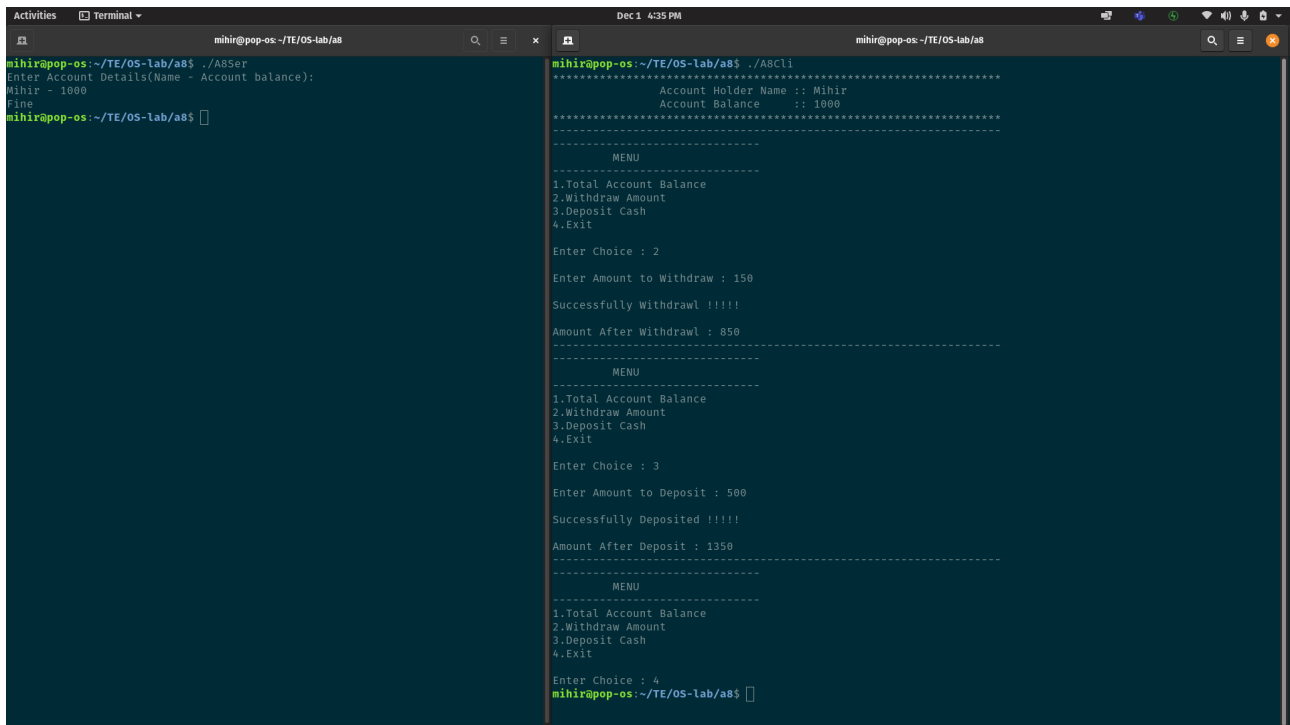
```
    shmdt(str);                // destroy the shared memory
```

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}
```

```
}while(ch<4);
```

```
return 0;
```

```
}
```



```
Activities Terminal
mihir@pop-os: ~/TE/OS-lab/a8
mihir@pop-os: ~/TE/OS-lab/a8$ ./ABSer
Enter Account Details(Name - Account balance):
Mihir - 1000
Fine
mihir@pop-os: ~/TE/OS-lab/a8$

mihir@pop-os: ~/TE/OS-lab/a8$ ./ABCl1
*****
Account Holder Name :: Mihir
Account Balance :: 1000
*****
MENU
-----
1.Total Account Balance
2.Withdraw Amount
3.Deposit Cash
4.Exit
Enter Choice : 2
Enter Amount to Withdraw : 150
Successfully Withdrawl !!!!!
Amount After Withdrawl : 850
-----
MENU
-----
1.Total Account Balance
2.Withdraw Amount
3.Deposit Cash
4.Exit
Enter Choice : 3
Enter Amount to Deposit : 500
Successfully Deposited !!!!!
Amount After Deposit : 1350
-----
MENU
-----
1.Total Account Balance
2.Withdraw Amount
3.Deposit Cash
4.Exit
Enter Choice : 4
mihir@pop-os: ~/TE/OS-lab/a8$
```