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**Class:** IT (Batch-D)

**Experiment No.:** 5

**Title:** Shared Memory

**Aim:** First program will write state name. Second program will write district within that state.

**Code:**

Process 1

#include <error.h>

#include <fcntl.h>

#include <semaphore.h>

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <sys/shm.h>

#include <sys/wait.h>

int main() {

int choice = 1;

char input[20];

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

int segment\_id = shmget(key, 4096, 0666 | IPC\_CREAT);

char\* shared\_memory = (char\*)shmat(segment\_id, NULL, 0);

while (choice == 1) {

printf("Shared memory data: %s\n", shared\_memory);

printf("Enter the state: \n");

scanf("%s", input);

sprintf(shared\_memory, input);

printf("Press 1 to continue: \n");

scanf("%d", &choice);

}

shmdt(shared\_memory);

return 0;

}

Process 2

#include <error.h>

#include <fcntl.h>

#include <semaphore.h>

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <sys/shm.h>

#include <sys/wait.h>

int main() {

int choice = 1;

char input[20];

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

int segment\_id = shmget(key, 4096, 0666 | IPC\_CREAT);

char\* shared\_memory = (char\*)shmat(segment\_id, NULL, 0);

while (choice == 1) {

printf("Shared memory data: %s\n", shared\_memory);

printf("Enter the state: \n");

scanf("%s", input);

sprintf(shared\_memory, input);

printf("Press 1 to continue: \n");

scanf("%d", &choice);

}

shmdt(shared\_memory);

return 0;

}

**Output:**







