EXPERIMENT NO:4

CLIENT

PROGRAM

```c
#include <stdio.h>
#include <sys/ipc.h>
#include <sys/types.h>
#include <sys/shm.h>

void main() {
    int shmid, i;
    int *shm, *it, a[10];
    long size = 1000;
    key_t key;
    printf("Enter the key: ");
    scanf("%d", &key);
    shmid = shmget(key, size, IPC_CREAT | 0660);
    shm = shmat(shmid, NULL, 0);
    it = shm;
    printf("Enter the elements: ");
    for (i = 0; i < 10; i++) {
        scanf("%d", &a[i]);
        it[i] = a[i];
    }
    it[10] = 1;
}
```

OUTPUT

```
Enter the key: 5
Enter the elements: 1
2
3
4
5
6
7
8
9
10
```

SERVER

PROGRAM

```c
#include <stdio.h>
#include <sys/ipc.h>
#include <sys/types.h>
#include <sys/shm.h>

int main() {
    int shmid;
    int *shm, *it;
    long size = 1000;
    key_t key;
    printf("Enter the key: ");
    scanf("%d", &key);
    shmid = shmget(key, size, 0);
    shm = shmat(shmid, NULL, 0);
    it = shm;
    printf("Server: Received data from client:\n");
    for (int i = 0; i < 10; i++) {
        printf(" %d ", it[i]);
    }
    printf("\n");
    return 0;
}
```

OUTPUT

```
Enter the key: 5
Server: Received data from client:
 1  2  3  4  5  6  7  8  9  10
```