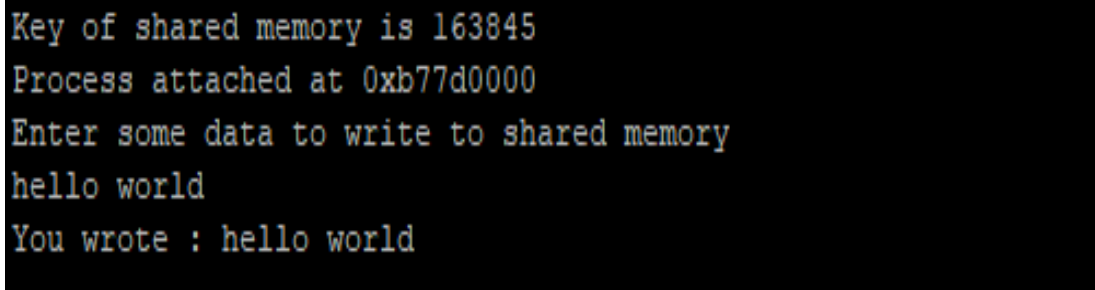


10. Write a C program that illustrates two processes communicating using shared memory.

PROGRAM:

```
#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<sys/shm.h>
#include<string.h>
int main()
{
    int i;
    void *shared_memory;
    char buff[100];
    int shmid;
    shmid=shmget((key_t)2345, 1024, 0666|IPC_CREAT);
    printf("Key of shared memory is %d\n",shmid);
    shared_memory=shmat(shmid,NULL,0);
    printf("Enter some data to write to shared memory\n");
    read(0,buff,100);
    strcpy(shared_memory,buff);
    printf("You wrote : %s\n",(char *)shared_memory);
    return 0;
}
```

OUTPUT:



```
Key of shared memory is 163845
Process attached at 0xb77d0000
Enter some data to write to shared memory
hello world
You wrote : hello world
```

11. Write C program to create a thread using pthreads library and let it run its function.

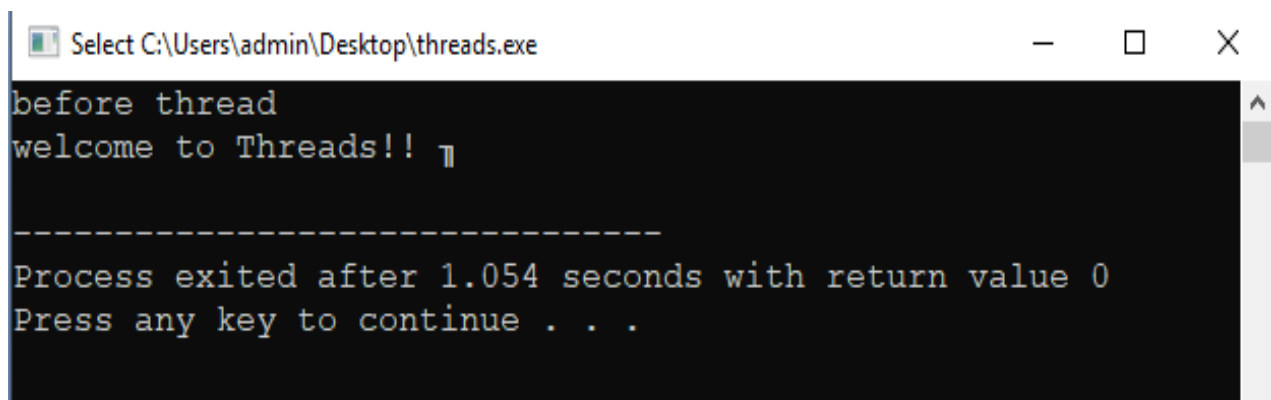
PROGRAM:

```
#include<unistd.h> //header file for sleep
#include<stdio.h>
#include<stdlib.h>
#include<pthread.h>

void *mythread(void *vargp)
{
    sleep(1);
    printf("welcome to Threads!! \n");
    return NULL;
}

int main()
{
    pthread_t tid;
    printf("before thread\n");
    pthread_create(&tid,NULL,mythread,NULL);
    pthread_join(tid,NULL);
    exit(0);
}
```

OUTPUT:



```
Select C:\Users\admin\Desktop\threads.exe

before thread
welcome to Threads!!

-----
Process exited after 1.054 seconds with return value 0
Press any key to continue . . .
```