```c
#include<stdio.h>
#include<stdlib.h>
#include<pthread.h>
#define BufferSize 10

void *Producer();
void *Consumer();

int BufferIndex=-1;
char BUFFER[10];

pthread_cond_t Buffer_Empty=PTHREAD_COND_INITIALIZER;
pthread_cond_t Buffer_Full=PTHREAD_COND_INITIALIZER;
pthread_mutex_t mVar=PTHREAD_MUTEX_INITIALIZER;

int main()
{
    pthread_t ptid,ctid;

    pthread_create(&ptid,NULL,Producer,NULL);
    pthread_create(&ctid,NULL,Consumer,NULL);

    pthread_join(ptid,NULL);
    pthread_join(ctid,NULL);
    return 0;
}

void *Producer()
{
    int i;
    for(i=0;i<15;i++)
    {
        pthread_mutex_lock(&mVar);
        if(BufferIndex==BufferSize-1)
        {
            pthread_cond_wait(&Buffer_Empty,&mVar);
        }
        BUFFER[++BufferIndex]='#';
        printf("Produce :%d \n",BufferIndex);
        pthread_mutex_unlock(&mVar);
        pthread_cond_signal(&Buffer_Full);
    }
}

void *Consumer()
{
    int i;
    for(i=0;i<15;i++)
    {
        pthread_mutex_lock(&mVar);
        if(BufferIndex==-1)
        {
            pthread_cond_wait(&Buffer_Full,&mVar);
        }

        printf("Consume :%d \n",BufferIndex--);
        pthread_mutex_unlock(&mVar);
        pthread_cond_signal(&Buffer_Empty);
    }
}
```

```
/*OUTPUT :

srcoem@srcoem-Veriton-M200-H81:~$ gcc pthrdcond1.c -o pthrd -lpthread
srcoem@srcoem-Veriton-M200-H81:~$ ./pthrd
Produce :0
Produce :1
Produce :2
Produce :3
Produce :4
Produce :5
Produce :6
Produce :7
Produce :8
Produce :9
Consume :9
Consume :8
Produce :8
Produce :9
Consume :9
Consume :8
Consume :7
Consume :6
Consume :5
Consume :4
Consume :3
Consume :2
Consume :1
Consume :0
Produce :0
Produce :1
Consume :1
Consume :0
Produce :0
Consume :0
srcoem@srcoem-Veriton-M200-H81:~$
*/
```