PAGE NO : DATE :

	DAIE:
	(program ito implement semaphor
0	
	1 (1) 40 6)
33	#include (Stalib.h)
	#include (polhread, h)
	#include (unistd.h)
	# define MAX_ITMS 20
	# deline BUFFER_SIZE 10
mental participal part	H GEMOR BUTTERS
And the second s	int buffer [BUFFER_SIZE];
The second secon	int head = 0;
	int tail = 0:
and the second s	int (nt=0;
Proceedings	pthread_mutex_t mtx:
Miles of the Control	pthread_cond_t cond_full:
A CONTRACTOR OF THE CONTRACTOR	pthread cond + cond empty;
A STATE OF THE STA	void enque (int item) {
	buffer[fail]=item;
	dail= (tail+i) v. BUFFER_SIZE;
	2 (1) ++;
100 Marie 100 Ma	9
	void deque() {
	int item = buffer [head]
	head : (head + il) puffer (725)
The second secon	3 redurn item;
of State of	wid?
The second secon	void* producer (void* param) \
The second secon	
Company of the	while(s)s
Commence of the Commence of th	1 nd 1 sem = rand() 1/. 100;
	pathread muter lock (& max);

DATE:	
while (cnt == BUFFER_SIZE) (
pthread_cond_wait (& cond_empty, &me	+x):
if (prod cod) = MAX ITMS) (
Dibread-muter-unlock (4mtx);	
p+hread_cond_signal (& cond_full),	<u>. </u>
break;	
break;	
enque (item);	
prod= (n++; han house	
print ("productioniced: "bd \n") item)	
pthread_mutex_unlock(&mtx);	
Pthread-cond-signal (& cond-full);	
Sleep Crand (17.9)	
ter 3 min har in the mount in	
3 redurn NULL:	
void consumer (void+ param) {	2.4
introns_cont=osoo bearing	
while (1) f	7
pthread_mutex_lock (lmtx):	
while (cn+==0) }	
pthread_cond_waid (& cood_for	11
Em+x); In house	-
The second 3	and the second second
if (cons_cos) = MAX_ZTMS) Y	
pathread-muter unlock (&mtx):	ecister weeks
p+hread_ Cond-Signal (4 cond_en	py)
break;	
4 Guardina de la Caración de la Cara	Buddingson on arrive a cilian
int item = deque();	The Real Control of Publication
Cons_cos++;	
prints ("Consumed 1. d \n"; tem);	

DATE: pahread_muter_ unlock (& max). pahread mund signal (frond empty) 3 leep (rand ().1.2); return Kull; int main (){ pthread_+ tid_prod , tid_cons; pahread_muter_init (& Max, NULL). pthread_cond_init (& cond_full, NULL) pthread cond in it (6 cond empty Now p Shread Crease (& tid prod, NULL, produce pthread-create (lid prod, NULL, CONSUMER, M. prodicing fred prod, NULL). pthread join (tid presons, NUIL); printl " production & consumption complex petread muser destroy (& mor); pthroad_ cond_desdroy(& cond_full) politicad Cond destroy (& cond empty) returno: patpul conscimed:78 produced; 41 Consumed: 62 consumed: 91 consumed; s Produced; 3 a. produced: 61 produced: 69 consumed: 81 produced: 7P consumed:61 produced: 60 produced as produced; s concimed: 91 consumed: 34 Consumed: 69 produced: 81