10 10 A 12/12/12 Demandrate inter proces commontation. chara f. int n; pooleun value set false; 30 leg dai has i nordange while Chaluesel) System out println ("In consumer coatings"); wait(); 2 cotch (InterruptedException e) { Systemous println ("Interripted Excedion caught"); System But println ("Got: " +1n); value Set = falle. Systemoute printin (" in Intimale Producer in"); notify(); return ni synchronized void put (ant o) { while (value Set) Expression printer ("In Producer waiting in"); wait (); could (Interrupted Exeption e) { system outprint in (Interrupted Exception _caught "); 3

thich = n; valueSet = true; system out printla ("put," +n); System out printin ("In Intimate Concumer in") notify(); class Producer Implements Punnable & 120 Producer (ag) { this 2= 2; new Thread (this, "Producer") . start(); public void run(){ int i= 0: while (ica) 2-put (i++); 4 3 class Consumer implements Runnable. Ag; (vormues (o 6)? this.g-g; nee, Thread (this, "consumer") start(); public void mous Intian; while (isa) 14 x=8-det(); & yetem out printin ("Consumed;"+1);

orFixeds
public static roid main (Hring[] argulf
0 g = new Q();
new Anducer (g);
new Consumer (s);
geten out pointle ("Press control to stop!");
put:
Intimate Consumer
Producer comiting
Pres condrol-c to stop.
Intimade Producet
consumed:0
Pert : 1
Intimate Consumer
Producer waiting
Got: 1
Intimate Producer
consumed:
Put:2
Intimate Concumer
Broducer waiting
Cont 12
Josimule Producey
Seancamed: 2
saaketh. W. Hanasi 18M22CS2 L2

B) Demonstrate DeadLock
class A S
sunctronized vold for (Bb) (
string name = Thread current Thread () get warrel
System out print In (mame + " entered 1.600 ")
tyl
Thread . Sleep (1000);
cutch (Exception e) {
Systemant printin ("A Interrupted");
System out printlnlname + "trying to call Rlad
bilast();
3
Void latOf
System-out-printly ("Inside A. last");
4
class B f
synchronized void bar(Aa) (
stoing name = Thread current [hread () get Name())
green out printin (name "entered B. box")
1 M 1
Thread cleep (1000)
coutch (Exception e) &
" 8 softement bring ("B Interrupted")
a. lasta;
3

void last () { System out printla ("Inside A.last")) pur Deadlock implements Runnables Aca= new A(); B b= new R(); Deadlock () 5 Thread current Thread O. set Name ("Main Thread"; Thread t = new Thread (this, "Racing Thread"); i () trate to t a.foo(b); System out println ("Back in main thread"); All aux pion silved bbar (a); System. out. println ("Back in other thread"); public static unid main (string arge []) { per peadlock(); taut: Mainthread entered A. foo lacing Thread entered 12 har lowing thread trying to out A. (aut) Parida Artart Back in other throad Mainthread trying to call Blast () 200ide A. 101+ Back in main thread says eth. M. Hanasi 1BM22CS242