Jan	Lab Program-10	Classmate Date Page 33	0
		Deallack (a
8)	Demonstrace and of prices to	Communication and Deadlock	
	Output	having thread entered to the boar	
		Man thread trying to call B. lest ()	
*)	IPC	Recingthread by ing to call A clastic	
	Put:0	Finite A. Last:	
	Rutinuate Consumer	Back in main Kneeds 18	
	Producer waiting	Back in other dured.	
	Entimate Conserver Proc	lucer	
	Put:		
	Entimate Consumer		6/1
	Producer waiting	15 15 16 6 10 A F x 12	
	consumed: 0		
	Got: 1 Butinati Producer		
	consumed: 1		
	Put: 2		
	Enfinalt Consumer		
	Got: 2 Entimali Producer		
	Construed: 2		
	Consumer waiting		
	0		

B) Deadlock Demonstrate Buley Hainthread entered A. foo Racing Thread entered B. & bar Main thread trying to call B. last () Smooth A. Last Racing Thread trying to call A. Last () Punice 4. last Back in main Horead Back in other floread. Butwell Consider consumed: 1 Enformate Consumer Entimate Producer Constants: 2 Course waiting

Lab Program -10 Source Code SPC dans QS boolean value Set = false; synchronized int get Of while (! value set) System. out. println ("In Consumer waiting In"); catch (Enterrupted Exception e) { System out prut In C" Interrupted Exception caught"); System out printin ("Got: "+n); value Set = false; System-out. print In ("In Entimate Producer In"); notify (); return; Synchronized void put (int n) [while (value Set) & bry ! System. out. muth CInfroducer & waiting In"); catch Conterrupted Exception e) ? System out- print by C" Enterrupted Exception caught");

```
this. n = n;
      valueset = true;
       System out printin (Put: 4, 11;
       System.out. println (" Suterrupted Consumer In");
clas Producer implement funnable ?
   Producer (Qq) {
                              new Consumer (9)1
      this q = q;
new Threads (this, "froducer"). start-().
    public void run () {
       while (1 415) }
       q. put (i++);
class Consumer implements Runnable &
   de 9;
   Consumer (Qq) {
      this. q = q;
     new Thread Cthis, "Consumer". start ().
   public void run C) {
   int-i=or
       while Cicis) {
           int r = q.get ();
```

System out print In ("consumed:"+ r); public static void main (String args []) {

System out print n C"USN: 1 BM23 CS 003 In Name: Aaron B Gray "); class PCFixed & Q q = New Q(); new Producer (9); System out println (" Press Cound-Cto stop 4) new Consumer (q); 9 . pul (c+1) B) Deadlock class A & synchronized void foo (Bb) ? String name = Thread. current Thread (). get-Name (). System-out. printin ("name +" entered A. foo"); Thread sleep (1000); Catch (Exception e) { System out. print in (" A interrupted"); System-out println ("name + "trying to call B. last ()"); b. last();

System-out- print In (" Puride A. last"), class B & My Essel Sand May During the willy & synchronized void bar (A a) { () ballood and String name = Thread current Thread (). get-Name (), System.out. print In (name + "entered B. berr"); Thread sleep (1000); Catch (Exception e) { System.out. print-In C" B interrupted"/; System. out. print in ("name +" trying to call 4- (ast ()"); void last-C18 System out print In (" Enside A-last"); class Deadlock inglements Runnable & A a = new AC); Bb= new Bl); Deadlock () { Thread-current Thread(). set Name ("Hair Thread"); Thread t = new Thread (this, "Racing Thread"); t-stenty (); a. foo(b); System. out. print hr ("Back in man Horead"),

public void run () & b. bar(a); System out. print In ("Back in other thread"), public static void main (String arys []) ? System out print In ("USN: 1BM23 (5003 In Name: Haron B Ajay"); new Deadlock (); (A) nod bigs box in smile String name - Thread arreat Thread (), get name () & System out onath (name + "entered 8 ban").