```
LAB program 10:
           Demonstrate tulu process communication
Week
    class of
          int n;
          boolean valueset = false
          synchronized int get() of
                 while (Ivaluesed)
                           System, out, println Con numer
                                           waitingh");
                            wait ();
                       catch (Interrupted Exception e) {
                              System. out. preut In Contercapted
                                              Exception caught");
                         3,50 april blow surling
                    System. out. proutin ("Got: "+n);
                     ValueSet = false;
                    System. out. println (" in Entimate Producerin);
                     notify();
                     return n;
         synchronized void put (Put n) [
                  while (value (et)
                       System.out.print(n("In produce waiting in"
          wait();
                                                waiting in"):
                        3 cotch (sulmyted Exception e) {
                            system out prentin (" Intumpted
                       4 (CASTONIA)
                                               Exception ough)
                                                  Thread imple
```

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this . n = n;
           valueSet = +rue;
           System. out-println ("put: "+1);
            System.out.preut(n (a)n Intermede Conneny
            notify();
      elas Producer implements punnable of
   0 9)
            producer (0 9) &
       this. 9=9;
     new Thoread (this, "producer"). starto.
of the county
           public vold ran () {
         (1) + " Joint 19 = 0; Manager
                 collile Ci = #3) {
g. put (i++);
     3.
     day consumer implements lunnable &
                 solute ( wayest) in
 consumer (0 9)2
               this 9 = 9;
               new Thread (this, "Consumer") start()
   (2011y)
public word ran() {
int i =0;
                while (i < 3) f
```

```
int r = q.qet();
            System. out-prout(n ("consumed ",+r);
         y
       3
  public class corrected 2
           public static soid main (String age CT) {
                @ q = new O();
                new producer (g);
                new Consumer(9);
                 Syrtem.out. prout(n (" preus Control-c
                              40 (topy);
             3 (d Dost Sau berlandings
   I howelf to recent a travelle a sound grante
output : 1 ) species pop
press control-c to etop.
put: 0
   Intimate Consumer
   producer waiting.
    antimale producer.
got: 0
    Intimate consumer.
 put:1
    producer weiting.
    consumed: 0
eati 1
    Intimate produces (1) Fail de
    consumed : 7.
put : 2.
    Intimate Consumer
   produces waiting.
 Got: 2
```

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Testimate produces
         concurred: 2
        Tutimate Consumer
         produce waiting
         autimate producu
       Got: 3
        Name: Shashedhar BM
         USN! 18m22CS 257.
        Dead Lock
clay A f
     Synchronized vold foo(B b) {
            String name = Thouand, current thouand
                                  get Name ())
             System. oct. println (name + "entered A. too"
             try d
                 Thouad . sleep ( $ 1000);
             catch (Exception e){
                  Systemout privating A Intulupt
             3
             Systemiolo preliation (name +" trying to
                                    call B. (art ()
             bilart();
       void last () {
              System. out . prently ("Enelde A.lant")
```

```
class B f
        synchronized void bar (A a) {
               String name = Thread curred thread
wite of stope Julting
                      1) . getName();
                 System. out. prentin (name + "entred
Thouad cleep (1000);
                                    B. bar ");
                 catch (Exception e) &
                      Systemiout. println ("B
                                     Entempted?
               System. out, pri wtin Game +" trying
                             to call Alast() }
     y a lait (); but here
     void cont () of
        Systemious préville (" Double Alan");
                      gright bount don
                           tralia shire
dan Deadlock Emplements Runnables
                   Norne: Charlidhar R
   A a = new A();
    B b = new B();
     DeadLock () &_
           Thread. current thread (). set Name
                              ("mainthread")
           Thread t = new thread (this,
                                 "RacingThread");
          t. staut();
           a.+00(b);
```

Systemout prévetin Ca Back in main Thursday public oold runch b. barla); Systemical president " Ract in other public static void main (string anger) new Deadlock (); y wings () working 3. Output; Pacingthued entend B. bar mainthread entered A. 400 Racingthread trying to call A. (art() Infde A. Last E () TAUL Bion Rack En other thread main thread trying to call B. last() Emilde A last Back in main thread Name: Sharhiethar BM USNI: 18m22CS257 emocator. () bosott Bureau. bourt

The de to ment traced (Tull)