```
Nokotha
     4768
                 semaphole-ex;
    J module
                                                         output
        semaphone sem;
                                                             got the key too pace of
                                                         o got the key ton proceed
                  begin
          initial
                                                          pulling back key by Procent
          gem = new(A);
                                                     30
                                                           Got the key toon process
           display ("Poccess 1"),
                                                       30 Putting back Key by Procend
           clisplay ("Processo");
                                                       30 led the ky ton procent
           display ("Poo( (55)3");
            display ("Processy")
                                                             boutting pack to the brocers
                                                         60 pulling back key by Proceeds
           end whomative (stong msg)
           $ display (got stime, "Hgot key too 15, mg);
             toleplay to show "Heat key toon!
            H 30',
            $display(dime, "truting back key by 1.5", mg);
            sem. bako)
        - display tak coil have the semiget & semi put method ushow eve are asther in a limb
            ushow we are getting the 2 keys and after some time putting bout the same key.
11
         - Each process will call
                                               o got the key too process?
                                              30 bulling back the key boyen pooces I
            module semaphone-fox,
                                               30 got the west too poorers?
            genaphone semi,
                                                60 Pulling back key by podes2
             indial begin
                                                 to day the part from braces 3
             sem = new(4);
                                                 90 pulling back key by poaces 3
            display ("poocess ]");
                                                    got the key too procount
                                                  130 pulling back key by process
            display ("processo");
                                                 90
             display ("Re : 3"))
             display("procenty");
             1011
            task automatic display (stong mig)
              sem. gel (3)
             ster (splay (stime, "It god very too 1.5", mag);
              $display (dime, all patting back key by 1.5', mog)
             430,
             sem.put (3)
               endlesh
               endmedul.
```

```
· 8 toseur begin loop exceutes p
\mathcal{B}
    who = ven(1)!
     You lk
       100 enor pool v
                                 pervallely.
        my-semiget();
                                  OP
        wh-beacossis)
                                   o poaces 7
        My-30m. put ();
                                   10 bookers 3
      chel
     forever poin
                                   so proces 1
    and-zow-detc).
                                       proces 2
    MY-poo(85)();
    en - 2 w. ben ();
                           - Il evill continues forever
     629
    JOIN
     module test,
     event e-a;
     initial bogin
     #30;
     -> e-a;
     end
    initial
             bogin
   coait (e-a);
    cnel
   task event (e-a):
        enail (6-a+ 21326 2001).
       $1 30 kg 1 11 event revendy);
        Groff or 22
       endmodule.
 4) module event-test;
      event C-aj e-b, c-c, c-d;
       initial begin
      #30
      -> e-a;
       e^{-0}
       initial begin
                                  task evail(ea);
                                     erce! (6 - a 40132600);
       evail (e-a).
        JOSK
                                   Adisplay ("even) co received")
        begin: Pti
                                    endlash
        ->eb;
                                   erdmoelule
      end: PI
     begin: Pa)
      ->e-c;
       endipa;
      begin: P3
      ->@_d
       end: p3
     join
```

```
3
           generator,
    class
     dand byle packed;
     endclass
    class driver # (mailbox m);
       Łask A,
       Id. spicy (" prikket screwed 1.d", mog);
      erdiask
      end class
             t est i
     module
                   mibor = new(),
         mailbox
          initial begin
          generato g=new();
                              d= new() /
          duver # (mb-new)
            reprod(16) begin
                a. vandomize ();
               mb-new. pul (8. parhel);
             #1 d.A())
             end
           endonodule
   Time: I calling Tosk LO-PRI_O Panibalty: 0
    Time: 2 calling Tech LO-PRI-I Portopily: 0
                      Took LO-PRI-2 posionity:0
                      Task Lo-PRJ-3 porionily:0
     Time: 3 calling
                       Took H7-PR70 PONONIN: I
     Time: 4 callery
                          Take LO-PRZ4 PONDOWY: O
      Time: 5 Callery
                 completed Task LO-PRJ-4 Poully: 0
               Cullery
      Time:5
                           Task HJ-PRZ-O ponoonty: I
      7,me:51
                 completed Tank Lo-PRJ-4 PONDOTHY: D
                 Comple led
      Time: 101
                             Task LO-PRI-3 privrity: 0
      Time: 157
                  completed Task LO-PRI-2 porionity: 0
       7 ime: 201
                  completed Tank Lo-PRI-7 philotity:0
      7,me:251
I abc-2 will excende in case I. & it will exceede parallely.
- 1303, in case I; we have look-join & it evill exceede parallely.
I abc-2 will exceude in
 - But in case 2: it will exceute in sequentrally, in which
  gase abe-2 evill not excure.
```

module test;
initial begin
staisplay ("process");
end
initial begin
staisplay ("process");
end
endmodule
endmodule

That more priconity than wait

10 @ #01 before trigger

@ #02 before trigger

@ #02 after trigger