```
inte a c program to implement dining philosophie
                   miliale coldis. ho
menal coldis. ho
miliale copthusad ho
ayme NVM - PHIL 5
                   ayme Nom - CHOP 5
                void dine ( not 1);
pursuad -t PHIII [ NUM - PH 1().
                 putrend_mulex -t Chop [Num-1(Hor).
               not main ()
                bos (i 21) i z Num - ettor i ++)
                 status = pthulad - mutix - mil (4 (hop (i)) NULL).
                  if (status 2/2-1) 01
                  1 pritt (" moter failed! m")
x shini
                   exit (1); delle I soole return looming
                puriod - maker mulacu ( + chops trick (but 1) by
or big
                (01. (121) 1 C = NUM-PHLL, 1++)
                  & status = ptheead - create (4 phil (i) NUI)
ely)
                                (void*) dure, (vid*)i).
                   if ( state ! 20)
Emply in
                   print ("Thread creation erros 14");
                                         Phylosophus 1 is eaterd
                   ereit (1)
                                       Mulcosophum 2 W Marentura
muckle of
                boi (izije NVM-PHIL), i++)

$ 'slatus = p thoroagein (phil (i), 4 mg)',
                 if (status! = 9) while I do N middenting
                   Frint ["Theead jain zailed \u");
                              philosophia 3 finesteed calific
                            philipped I previous lateria
```

```
esat (11) pur dun qu'il
for (iz1; i < WUM-CHOP; it+)
  & status - pthread - mutex - distriby (& Chopling
    if ( status! 20)
    & prist (" muter dietroyed! 14").
      excit (1)
       1. CHOP (NIVM-ICHOY)
     setum 0;
  void dine (int ")
   Flint (In Philosophu otod Ltunding M", 4)
    pituead muter lock (4 chopstrich (m)
     pluread mitter - lock ( f chopshik ( ( 4+1) % Mi
 puit ["philosophus Tod thinking", 4).
  pthrad - mutex - misch ( + Chopstie ( m)
   plinad - miles - miloca (4 chopstich (luti)).
    pent de (" un Philosophur 1. earing " n's ").
     ( troid + ) orms ( thirt + ) =
                         (Os 1 Publis )
 Output.
Philolosphur 1 1/8 lturbing
Philosophie 1 is eating
            2 is thanking
 y holosophun
            3 is thurhing
 philosophu
  pulosophu 3 is eating
   pularophu us thurking
   philosophus 5 ls Thinking
              3 finished eatting
   Philosophin
              1 brushed eating
   philosop hur
```

eSupr Philosop lin eating u is eating philos of hu philosop hu s us eating pulosophus 2 binished calting pulas ophur 5 burshed ealtries philosophin muched eating (CANFIA F. BABA)

```
Philosopher 1 is thinking
Philosopher 1 is eating
Philosopher 3 is thinking
Philosopher 3 is eating
Philosopher 4 is thinking
Philosopher 5 is thinking
Philosopher 2 is thinking
Philosopher 5 is eating
Philosopher 3 Finished eating
Philosopher 2 is eating
Philosopher 4 is eating
Philosopher 1 Finished eating
Philosopher 5 Finished eating
Philosopher 2 Finished eating
Philosopher 4 Finished eating
Process returned 0 (0x0) execution time : 6.071 s
Press any key to continue.
```