Produttore:

While(true){

Item =..;

if(item%2==0){

wait(mutexP);

if(numPari == 50){

attesaProd++

wait(semProd);

signal(mutexP)

}else{

a[i] = item;

i = (i+1)%50; numPari++;

if(attesaCons>0){

attesaCons--; signal(semCons); }

if(numPari>=20 && attesaCons20>0){

attesaCons20--; signal(semCons20);

signal(mutexP); }

}else {

Wait(mutexD);

If(numDisp == 50){

attesaProd++;

wait(semProd); signal(mutex);

}else{

a[i] = item;

i = (i+1)%50; numDisp++;

if(attesaCons>0){

attesaCons--; signal(semCons);

signal(mutexP); }

}}

VARIABILI:

Int [] a = 100; Int i = 0; j = 0; attesaProd = 0; attesaCons = 0; attesaCons20 = 0; numPari = 0; numDisp =

Semafori:

mutexP = 1; mutexD = 1; semCons = 0; semProd = 0; semCons20=0;

Consumatore:

While(true){

If(item%2==0){

Wait(mutexP);

If(numPari==0){

attesaCons ++;

wait(semCons);

signal(mutexP);

}else{

Item = a[j];

J = (j+1)%50; numPari--;

If(attesaProd>0){

attesaProd--;

signal(semProd);}

signal(mutexP);}

}else{

Wait(mutexD);

If(numDisp==0);

attesaCons++;

wait(semCons);

signal(mutexD);

}else{

Item = a[j];

J = (j+1)%50; numDisp--;

If(attesaProd>0){

attesaProd--;

signal(semProd);}

signal(mutexD);}

}}