Variabili:

Free = 50;

nAFB, nAFC, nACB, mACC = 0 //attesa

nBiscotti, nCracker = 0;

Semafori:

mutex = 1 //mutua esclusione

sem\_FC, sem\_FB = 0;

Fornitore biscotti:

wait(mutex)

if(free == 0){

nAFB++

signal(mutex)

wait(sem\_FB)

}else

Free--;

nBiscotti++;

if(nBiscotti = nCracker +1 & nAFC>0 & free>0){

nAFC--;

signal(sem\_FC)

nCracker++

free—

}

signal(mutex);

}

Fornitore cracker

Wait(mutex)

If(free==0 OR (nCracker >= nBiscotti & nCracker>=3)){

nAFC++;

signal(mutex)

wait(sem\_FC)

}else

nCracker++;

free—

signal(mutex)

}

}

Consumatore Biscotti

Wait(mutex)

If(nBiscotti>0)

nBiscotti--;

if(nAFB >0){

nAFB—

nBiscotti++

signal(sem\_FB)

}else{

If(nAFC>0 & nCracker<nBiscotti & nCracker<3){

nAFC –

signal(sem\_FC)

} else

Free++

}

Signal(mutex)

Consumatore Cracker

Wait(mutex)

If(nCracker>0){

nCracker—

if(nAFC>0 & (nCracker+1<nBiscotti || nCracker<=3)){

nAFC—

nCracker++

signal(sem\_FC)

}else{

If(nAFB>0)

nAFB—

signal(sem\_FB)

}else

Free++

}

Signal(mutex)