/\* program Bank Simulation \*/

Semaphore teller = 2,

coord = 2

Semaphore loaner = 1

Semaphore ready\_For\_teller = 0,

ready\_For\_loaner = 0,

leave\_teller = 0,

leave\_loaner = 0,

void Customer()

{

Randomize\_request()

If (loan):

Wait(loaner)

Go\_to\_loaner()

Ask\_for\_loan() Signal(ready\_for\_loaner)

Wait(receipt)

Leave\_loaner ()

Signal(leave\_ loaner)

Exit\_bank()

Else:

Wait(teller)

Go\_to\_teller()

Ask\_for\_trans() Signal(ready\_for\_teller)

Wait(reciept)

Leave\_teller()

Signal(leave\_teller)

Exit\_bank()

}

Void loaner()

{

Wait(ready\_For\_loaner);

Accept\_transaction();

Process\_Request();

Update\_Balance();

Signal(receipt);

Wait(leave\_loaner);

Signal(loaner);

}

Void teller()

{

Wait(ready\_For\_teller);

Wait(coord);

Process\_loan();

Update\_balance();

Signal(coord);

Signal(receipt);

Wait(leave\_teller);

Signal(teller);

}