**List of Semaphores:**

* box
  + initial value: 2
  + represents the box office agents
* ticket\_payment1
* ticket\_payment2
* give\_ticket1
* give\_ticket2
* taker
  + initial value: 1
  + represents the ticket taker
* concession
  + initial value: 1
  + represents the concession stand worker

Pseudocode:

void main()

{

}

void customer()

{

int custnr;

wait(box);

choose\_movie();

if movie is full

end;

signal(ticket\_payment1)

wait(give\_ticket1)

}

void box\_office\_agent()

{

}

void concession\_worker()

{

}

void ticket\_taker()

{

}