

### ΕΡΓΑΣΙΑ 3

**conditions:** passengers, train, intrain, getDown, waitmain

**global μεταβλητές:** waitingPassengers, ridingPassengers, trainCapacity(capacity), isriding, totalVisitors, leave

Τρενάκι:	Επιβάτης:
<pre>while(1){     mutex_lock     isriding=0;     if(waitingPassengers&gt;0&amp;&amp;ridingPassengers&lt;capacity){         waitingPassengers--;         ridingPassengers++;         cond_signal(passengers);     }      cond_wait(train);     mutex_unlock      //ride      mutex_lock     for(;ridingPassengers&gt;0; ridingPassengers--){         cond_signal(intrain);     }     if(leave!=capacity){         cond_wait(getDown);     }     leave=0;     mutex_unlock }</pre>	<pre>mutex_lock if(isriding!=0    ridingPassengers==capacity){     waitingPassengers++;     cond_wait(passengers); } else{ ridingPassengers++; }  if(ridingPassengers&lt;capacity&amp;&amp;waitingPassengers&gt;0){     waitingPassengers--;     ridingPassengers++;     cond_signal(passengers); }  totalVisitors--; if(επιβιβασμενοι ειναι πολλαπλασιο του capacity){     if(ridingPassengers == capacity){         isriding=1;         cond_signal(train);     } } cond_wait(intrain); leave++; if(leave==capacity){     cond_signal(getDown); } mutex_unlock</pre>