

ΕΡΓΑΣΙΑ 2

conditions: go_blue, go_red

global μεταβλητές: inRed (inBridgeRed), inBlue (inBridgeBlue), passed (passedCars), change (changePriority), wRed (waitingRed), wBlue (waitingBlue)

Entrer_bridge:

mutex_lock

```
if(inRed>0 || inBlue==capacity || passed==change){
    wBlue++;
    cond_wait(go_blue);
    passed++;
    if(wBlue>0 && inBlue<capacity && passed<change){
        wBlue--;
        inBlue++;
        cond_signal(go_blue);
    }
}
else{
    inBlue++;
    passed++;
    if(wBlue>0 && inBlue<capacity){
        wBlue--;
        inBlue++;
        cond_signal(go_blue);
    }
}
mutex_unlock
```

Exit_bridge:

mutex_lock

```
inBlue--;
if(wBlue>0 && inBlue<capacity &&
    (passed<change || wRed==0){
    wBlue--;
    inBlue++;
    cond_signal(go_blue);
}
else if(wRed>0 && inBlue==0){
    wRed--;
    inRed++;
    passed++;
    cond_signal(go_red);
}
else if(wRed==0 && wBlue==0){
    passed==0;
}
mutex_unlock
```