

*11 players in a circle and 365 tokens first owned by a single player. Players with at least two tokens can either remove one token and give another one left or move two right and one left. How quickly does the game stall, how many tokens are left, and where are they?*

The run of a R simulation like

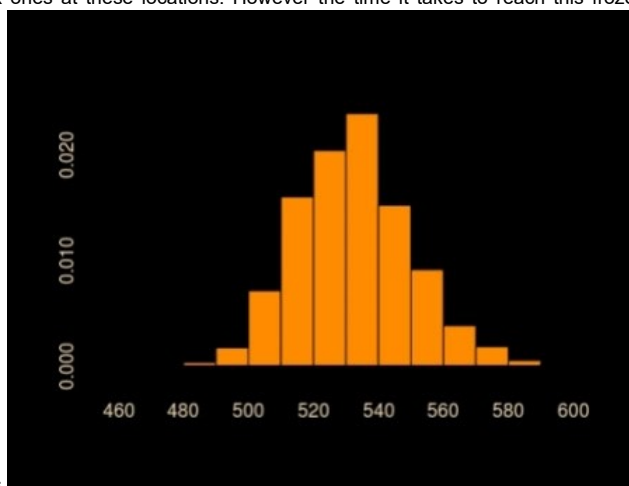
```
od=function(i) (i-1)%%11+1
muv<-function(bob) {
  if (max(bob)>1) {
    i=sample(rep((1:11)[bob>1],2),1)
    dud=c(0,-2,1)
    if((runif(1)<.5)&(bob[i]>2)) dud=c(2,-3,1)
    bob[c(od(i+10),i,od(i+1))]=bob[c(od(i+10),i,od(i+1))]+dud
  }
  bob}

```

always provides a solution

```
> bob
[1] 1 0 1 1 0 1 1 0 1 0 0
```

with six ones at these locations. However the time it takes to reach this frozen configuration varies, depending on the sequence of random



choices.