2022-10-17

## Week 1 Assessment

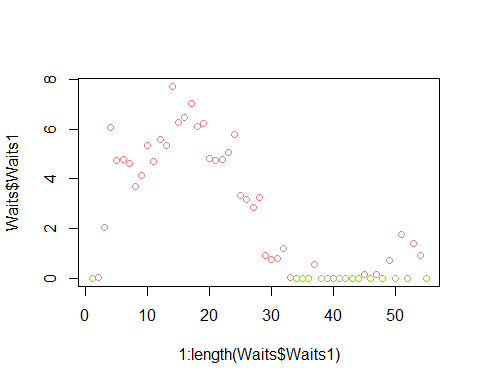
### Average queue time

Average queue time is 2.51 and 1.76 for queues 1 and 2 respectively.

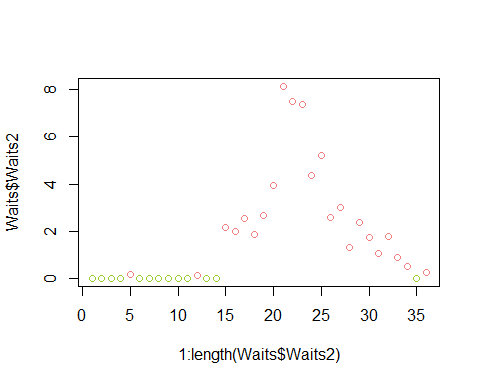
### Plot Waiting times

Green dots represent points with zero waiting time.

plot(1:length(Waits$Waits1),Waits$Waits1,col = ifelse(Waits$Waits1 == 0,'olivedrab3','lightcoral'))



plot(1:length(Waits$Waits2),Waits$Waits2,col = ifelse(Waits$Waits2 == 0,'olivedrab3','lightcoral'))



### Record Sample Path

Tandem(Starting.seed = 12345,c=c(1,1),Tend=50)

## $Waits1  
## [1] 0.000000000 0.038454365 2.034411544 6.060533502 4.733212315 4.796847543  
## [7] 4.632414079 3.674794018 4.132938619 5.341548484 4.715304747 5.578399711  
## [13] 5.347532466 7.715112158 6.283462124 6.481623824 7.030329998 6.098407749  
## [19] 6.233032995 4.799219411 4.734409717 4.766516812 5.055788397 5.764267569  
## [25] 3.321018207 3.168948050 2.851195971 3.252224838 0.919313522 0.773549715  
## [31] 0.812654571 1.196437130 0.032772623 0.000000000 0.000000000 0.000000000  
## [37] 0.550519036 0.000000000 0.000000000 0.000722848 0.000000000 0.000000000  
## [43] 0.000000000 0.000000000 0.151553921 0.000000000 0.173494025 0.000000000  
## [49] 0.713434167 0.000000000 1.763795492 0.000000000 1.415130228 0.923496134  
## [55] 0.000000000  
##   
## $Waits2  
## [1] 0.0000000 0.0000000 0.0000000 0.0000000 0.1824345 0.0000000 0.0000000  
## [8] 0.0000000 0.0000000 0.0000000 0.0000000 0.1025022 0.0000000 0.0000000  
## [15] 2.1746525 1.9764884 2.5449690 1.8604654 2.6614602 3.9535686 8.1362417  
## [22] 7.4801301 7.3737115 4.3667114 5.2038468 2.5775417 2.9837839 1.3158578  
## [29] 2.3751297 1.7198472 1.0624743 1.7657176 0.8809762 0.4993549 0.0000000  
## [36] 0.2368030