

ECS 455: In-Class Exercise # 6

Instructions

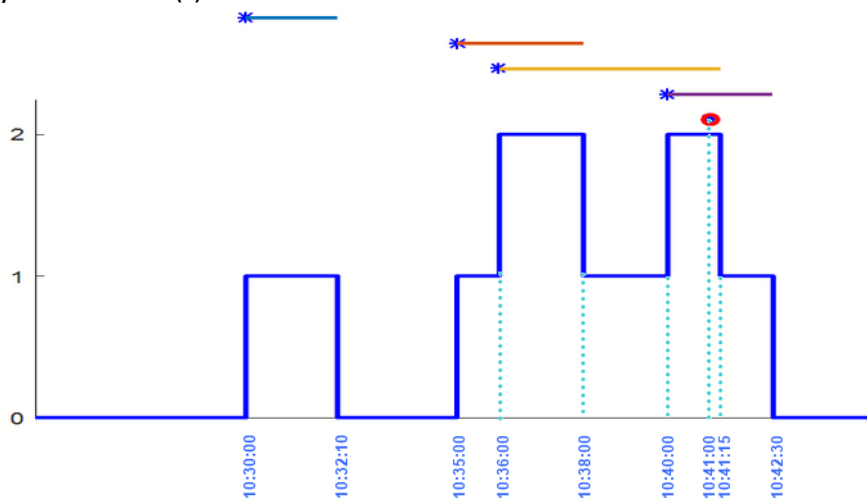
1. Separate into groups of no more than three persons.
2. The group cannot be the same as your former group.
3. Only one submission is needed for each group.
4. **Write down all the steps** that you have done to obtain your answers. You may not get full credit even when your answer is correct without showing how you get your answer.
5. **Do not panic.**

Date: <u>01/03/2017</u>		
Name	ID <small>(last 3 digits)</small>	
Prapun	5	55

Consider a trunked system with $m = 2$ channels. Assume that the state of the system is $K(t) = 0$ for $t < 10:30\text{AM}$. The following table shows the (new) call requests and the corresponding call durations (if the calls can be made) between 10:30-10:45 AM.

Call Request Time	Call End Time	Call Duration (if the call can be made)
10:30 AM	10:32:10	2:10 min
10:35 AM	10:38:00	3:00 min
10:36 AM	10:41:15	5:15 min
10:40 AM	10:42:30	2:30 min
10:41 AM	10:43:15 blocked	2:15 min

1. Plot the system state $K(t)$ from $t = 10:25\text{AM}$ to $10:45\text{AM}$.



[K Evolution Exercise 2.m]

2. How many calls are blocked?

one call (the last one)