Name: Preyash

Registration Number: 20BPS1022   Date: February 10, 2022
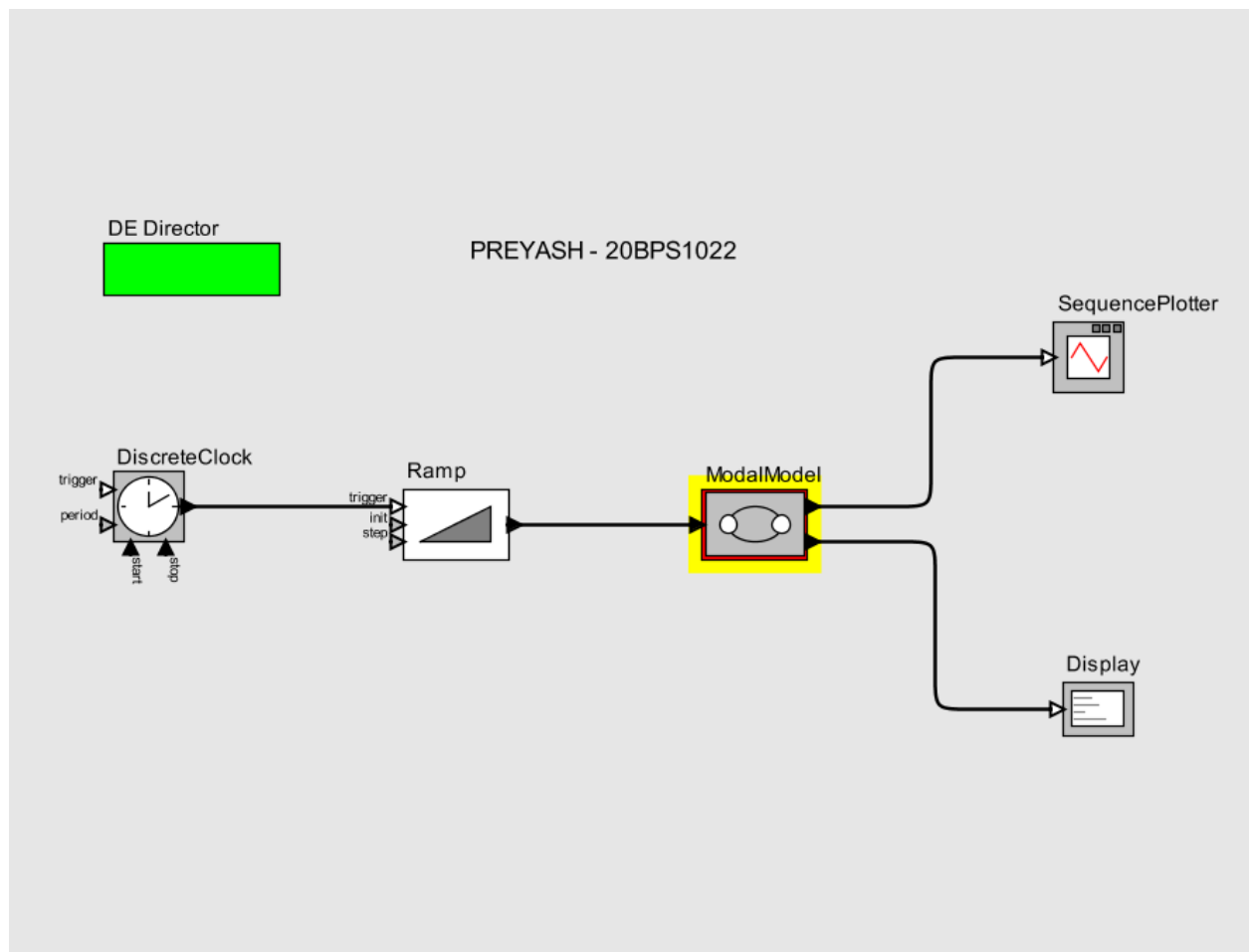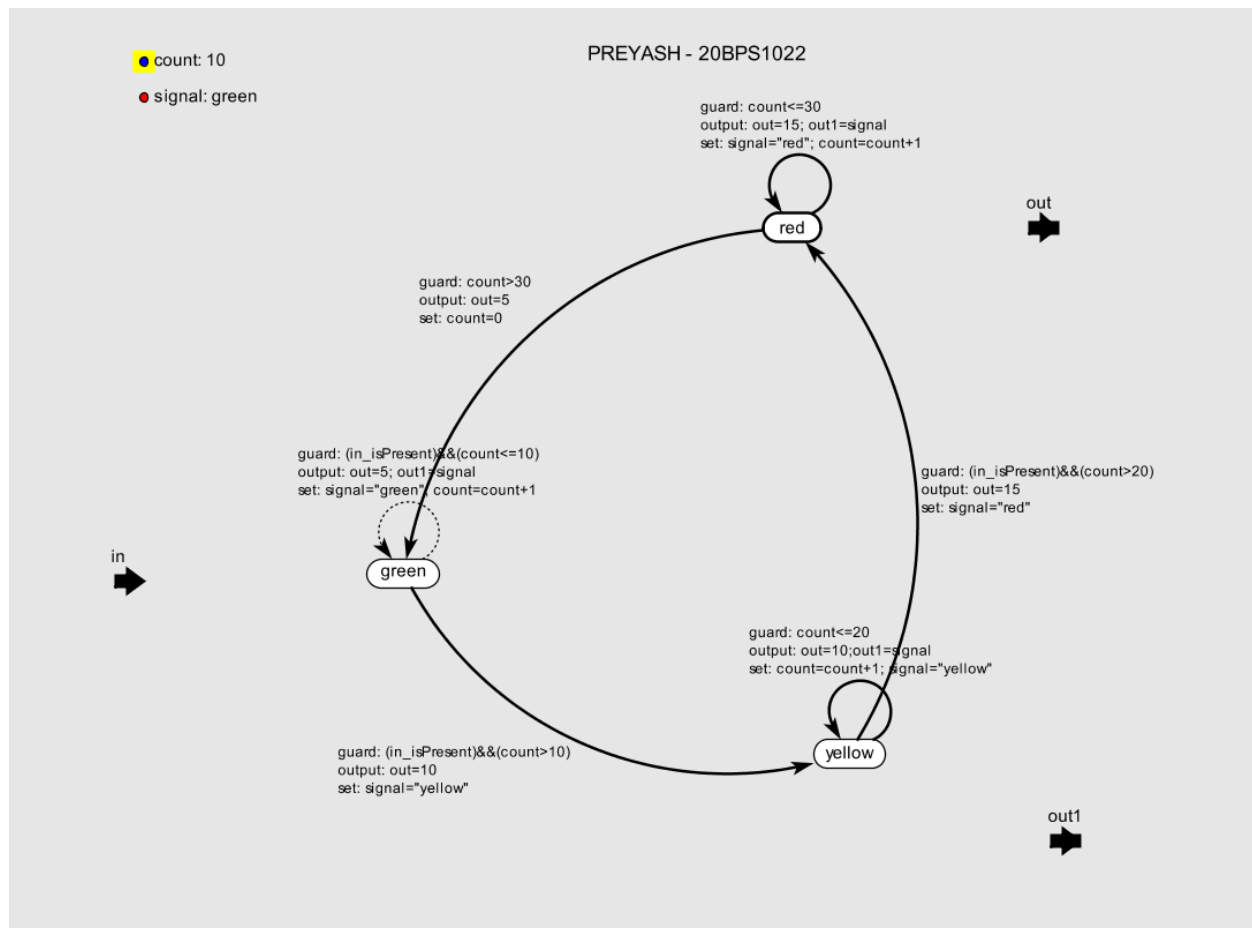
LAB-03

CSE2021

DISTRIBUTED REAL-TIME SYSTEMS
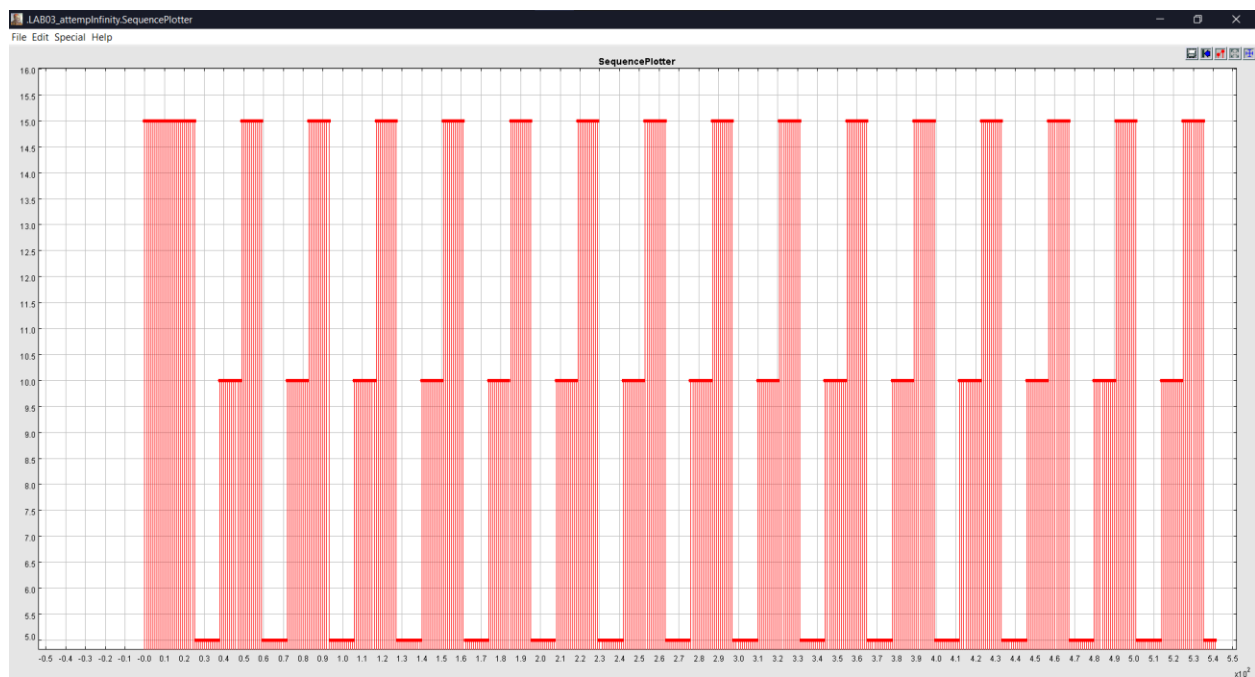
Tools Used: Ptolemy

Task: Extended State machine model of a traffic light controller the track the passage of time, at regular intervals.

Circuit:

count: 10

signal: green

PREYASH - 20BPS1022

guard: count<=30
output: out=15; out1=signal
set: signal="red"; count=count+1

red

out

guard: count>30
output: out=5
set: count=0

guard: (in_isPresent)&&(count<=10)
output: out=5; out1=signal
set: signal="green"; count=count+1

guard: (in_isPresent)&&(count>20)
output: out=15
set: signal="red"

in

green

guard: count<=20
output: out=10;out1=signal
set: count=count+1; signal="yellow"

guard: (in_isPresent)&&(count>10)
output: out=10
set: signal="yellow"

yellow

out1

Output:

File Edit Help

```
yellow
yellow
yellow
yellow
yellow
yellow
yellow
red
red
red
red
red
red
red
red
red
red
red
green
green
green
green
green
green
green
green
green
green
yellow
yellow
yellow
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red
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green
green
green
green
```