HW#3, Problem #3
(Note that $\alpha = 2$, so a token represents one-half slot)

A new transition “T8” with rate $\lambda_L$ is added to account for subrating for low-priority clients

For the homework in which only the middle partition exists, the enabling condition for “T8” is $\text{mark}($“RS”)==0

For case study #2 in which all three partitions exist, the enabling condition for “T8” is $\text{mark}($“RL”)==0 && \text{mark}($“RS”)==0

Ex1: Reward assignment function for calculating the population of low-priority clients:

```cpp
reward_type
class pop_low_priority()
{return
(mark("SLL")(\alpha -1) +
mark("SL")/\alpha);}
```

Ex2: Reward assignment function for calculating the throughput of low-priority, high-QoS clients:

```cpp
reward_type
class th_low_priority_high_QoS()
{return
rate("T4");}
```