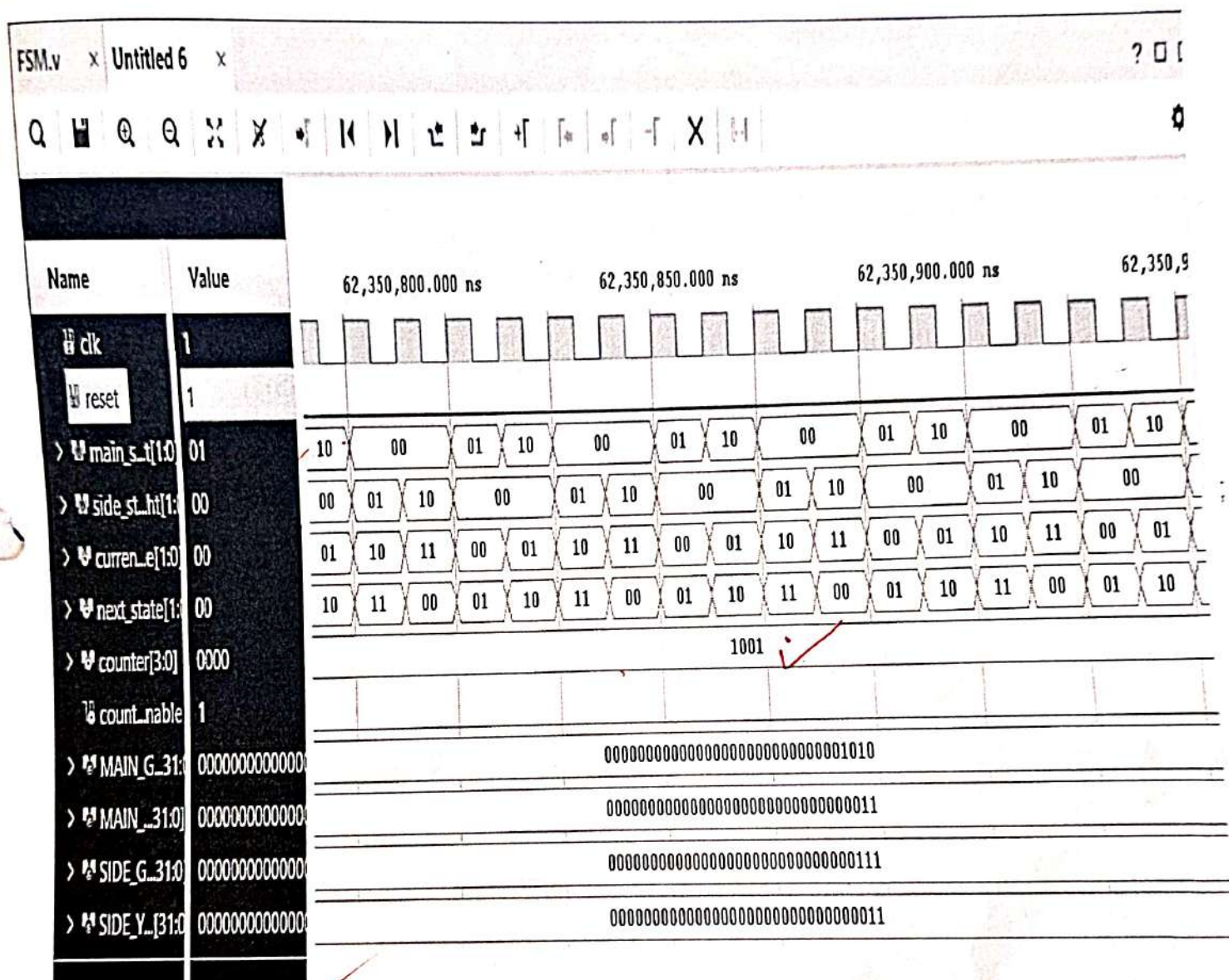
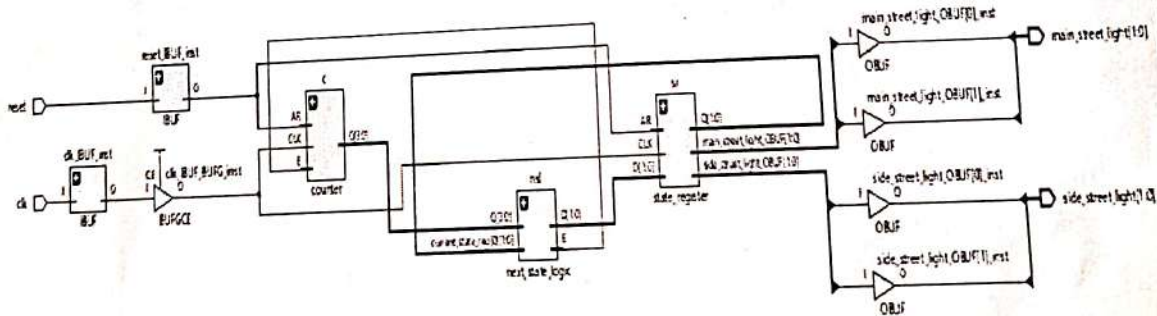
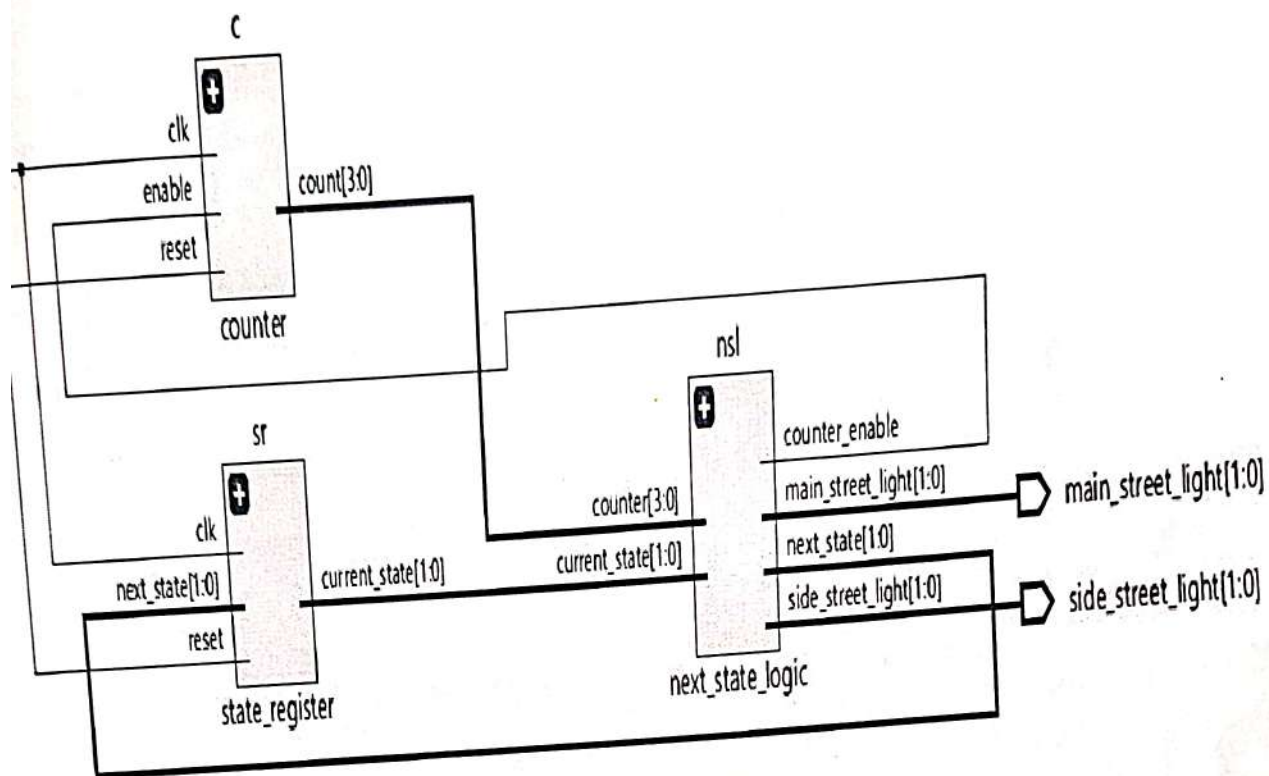


Waveform Results: The simulation shows the segment outputs for current and next state of moore machine

SIMULATION WAVEFORM:

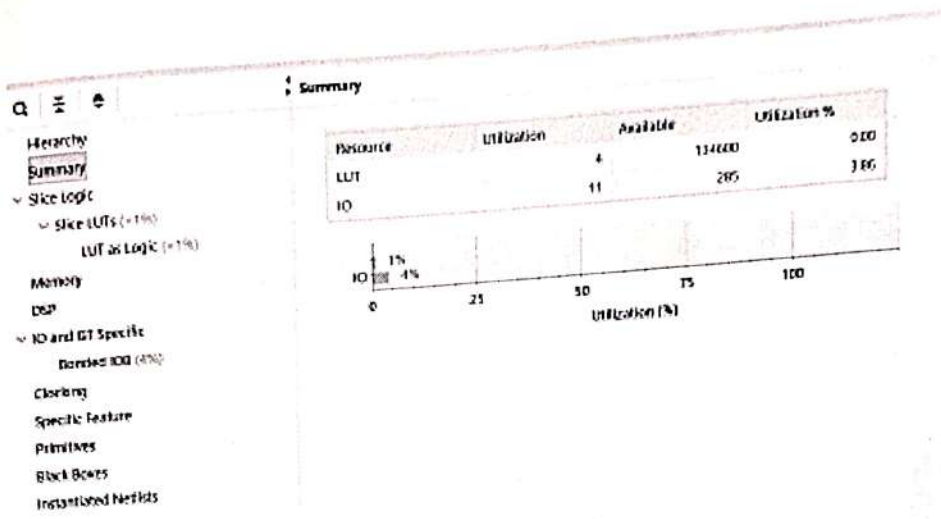


HEMATIC:



Synthesis

The Synthesis schematic is same for both the approaches.
Resource Utilization Summary:



6. Conclusion

FSM to control traffic lights at a simple intersection with two streets was successfully implemented. All states were checked. Correct outputs were generated. And RTL schematic and Synthesis schematic was also correctly generated.