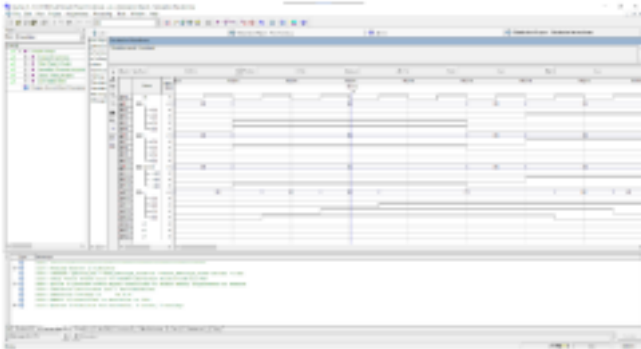


## Timing Diagram

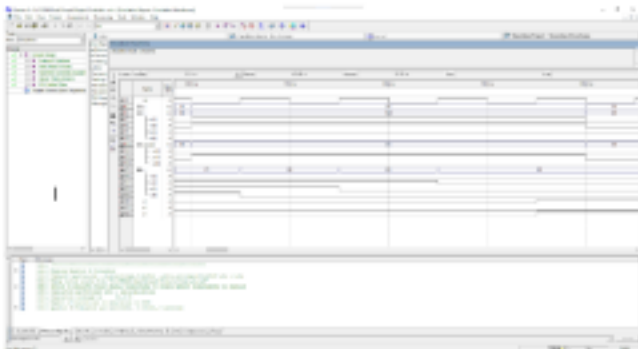
- XOR (001):

XOR operation between 3(0011) and 4(0100) and getting the result: 7(0111) where carry flag = 0, sign flag = 0 & zero flag = 0



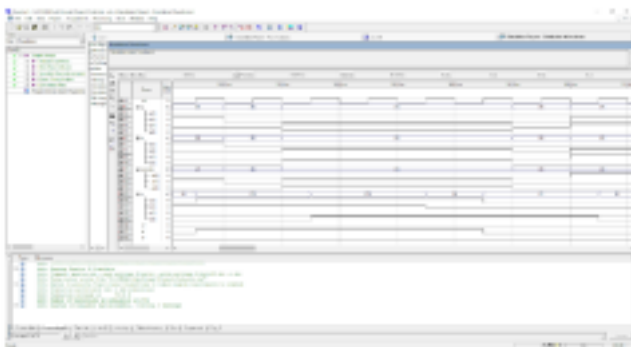
- ADD (010):

ADD operation between 4(0100) and 12(1000) and getting the result: 0(0000) where carry flag = 1, sign flag = 0 & zero flag = 1.



- AND (011):

AND operation between 3(0011) and 5(0101) and getting the result: 1(0001) where carry flag = 0, sign flag = 0 & zero flag = 0.



- SUB(100):

SUB operation between 6(0100) and 6(1000) and getting the result: 0(0000) where carry flag = 0, sign flag = 0 & zero flag = 1

