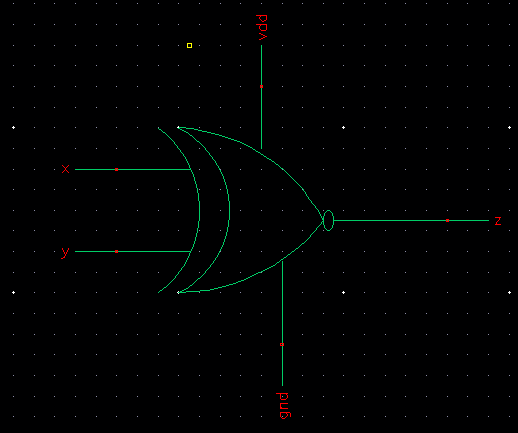
**Harshitha Yendapally**

**Explanation: XOR,FULL ADDER,8 BIT ADDER,16 BIT ADDER**

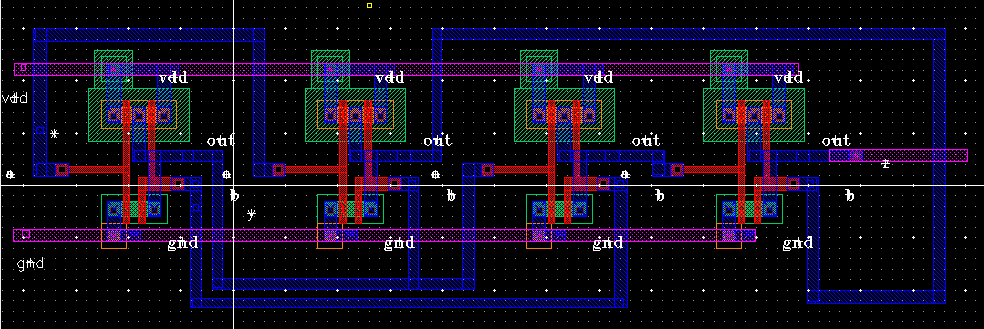
Task1: To create a xor gate.

Procedure: XOR gate is created by using nand gates.

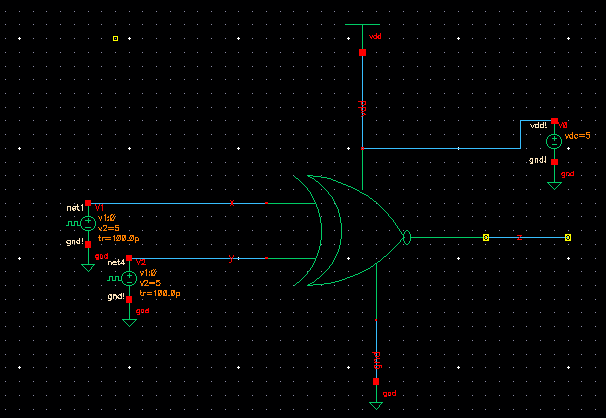
Schematic:



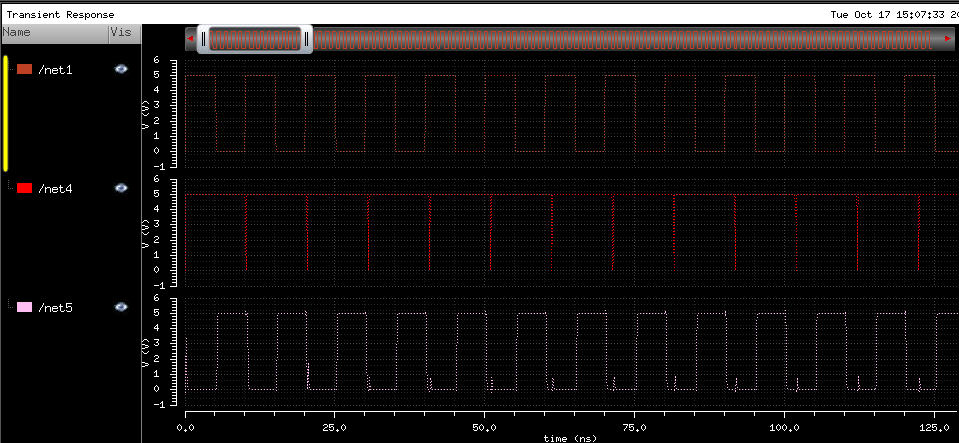
Layout:



Simulation:



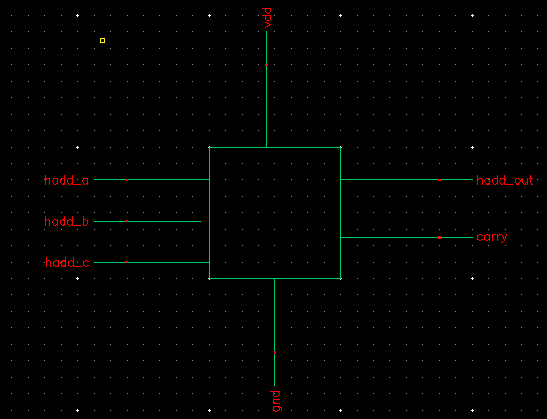
Output Waveforms:



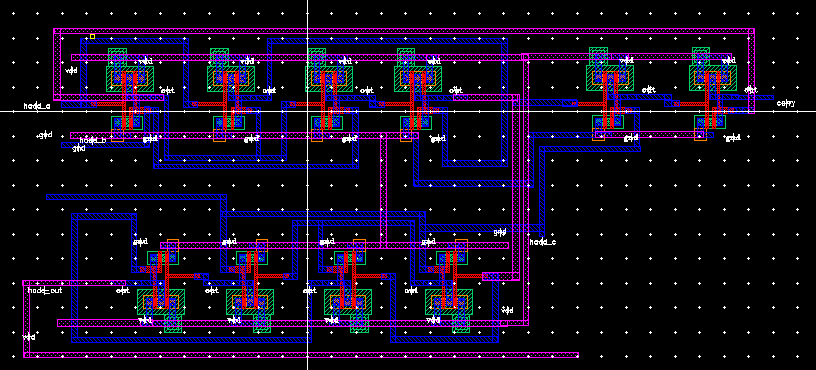
Task2: Full adder

Description: Full adder is created by using xor gates which are created in Task1.

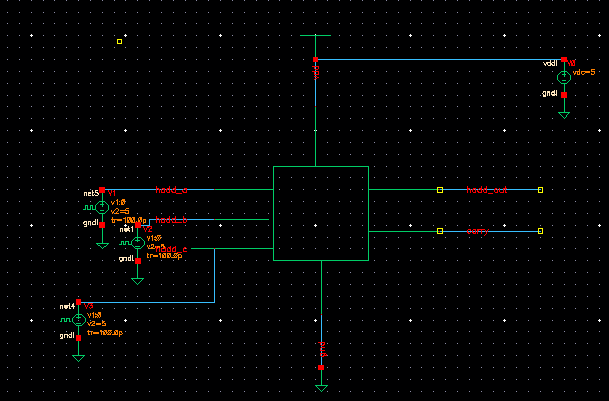
Symbol:



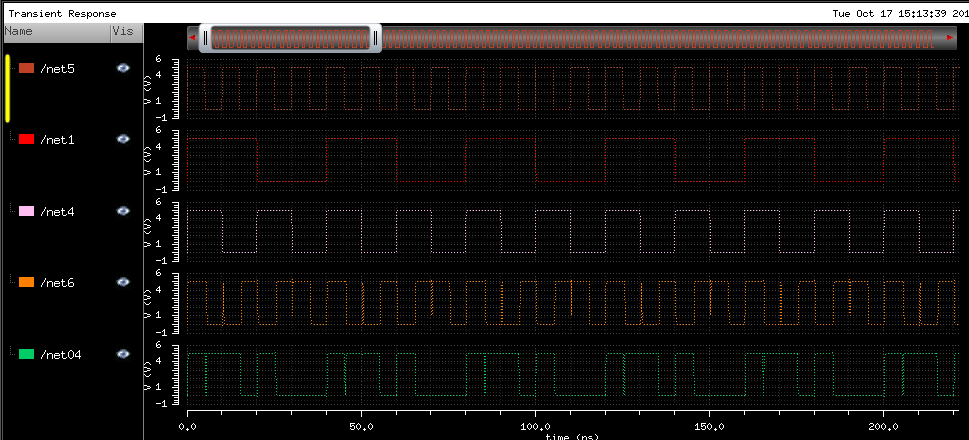
Layout:



Schematic



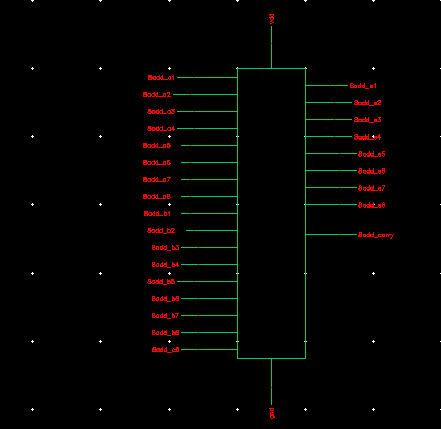
Output waveform:



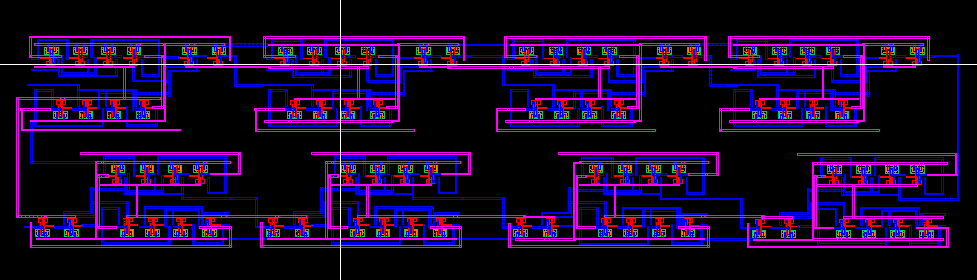
Task-3:

8 bit adder is designed using 1 bit full adders created in task2

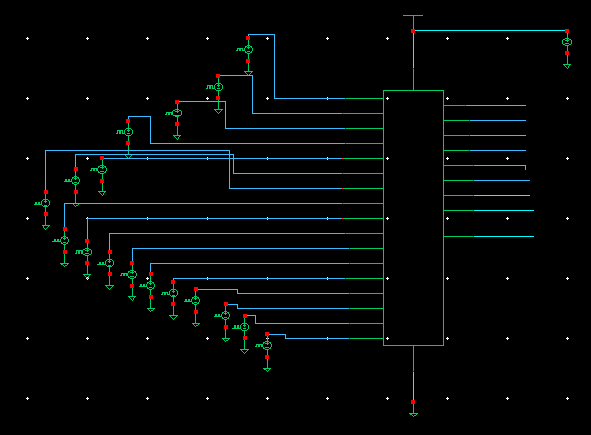
Symbol:



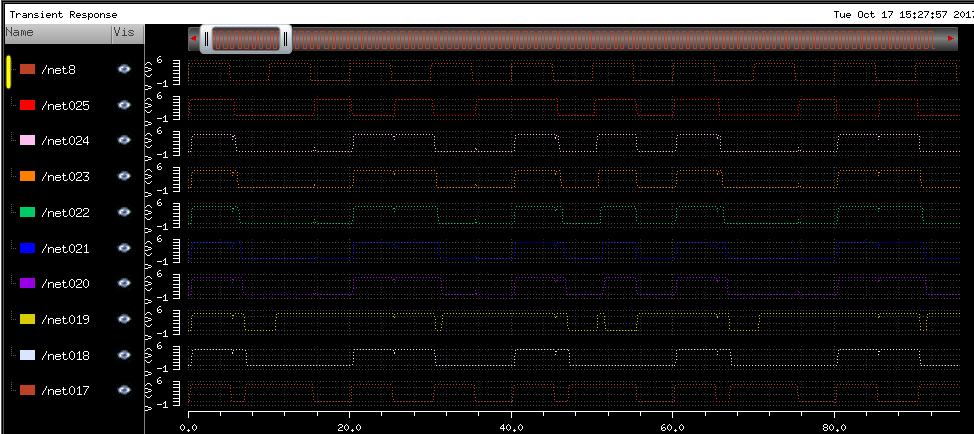
Layout:



Schematic:



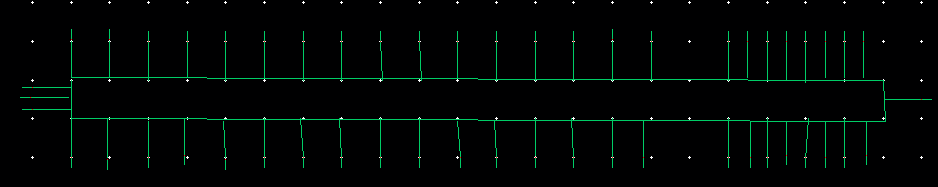
Output waveform:



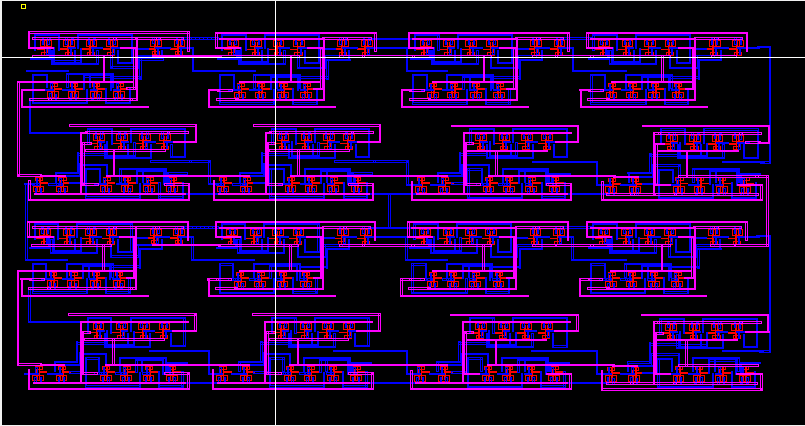
**Task-5: 16 bit adder.**

**16 bit adder is created by using two 8 bit adders.**

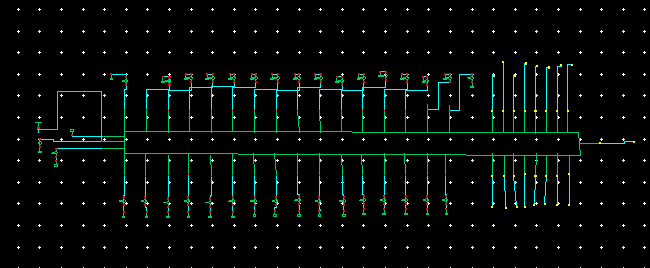
**Symbol:**



**Layout:**



**Schematic:**



**Output waveforms:**

