VLSI LAB Experiment-8 Transistor Layouts

Group Number: 2

Group Members:
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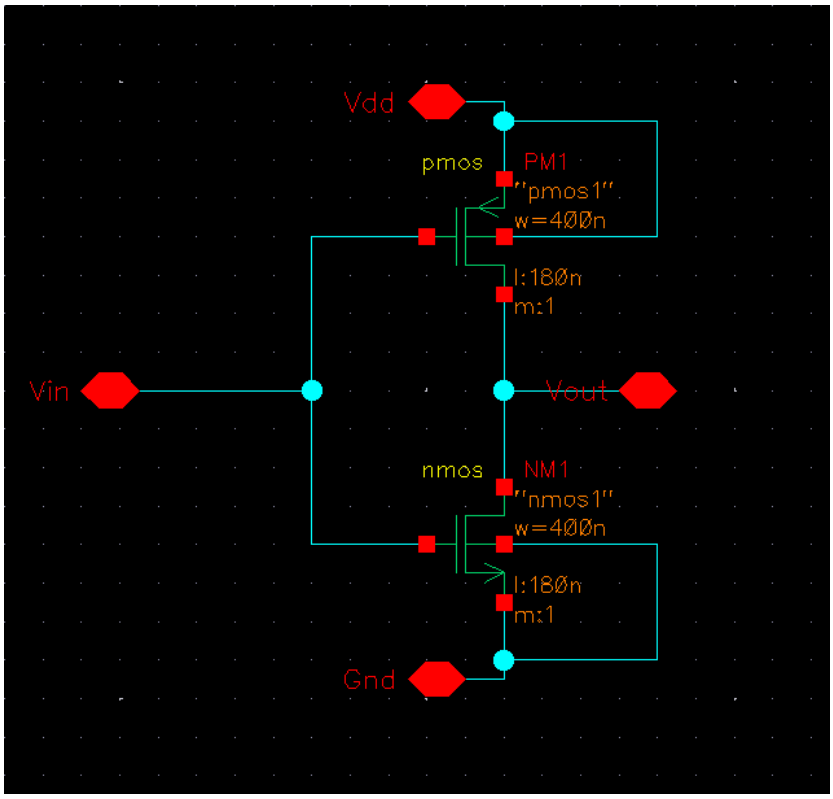
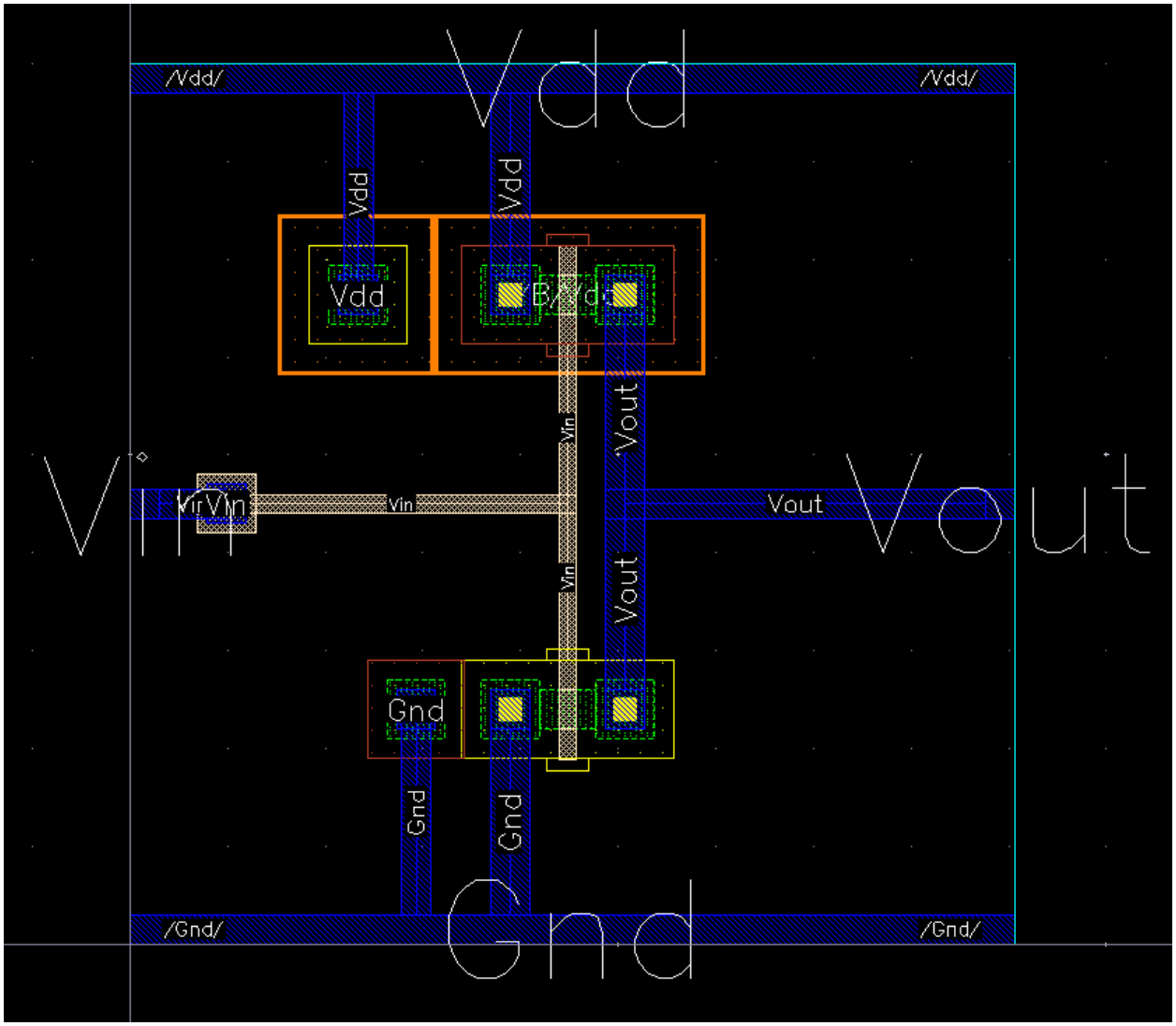
Schematic:

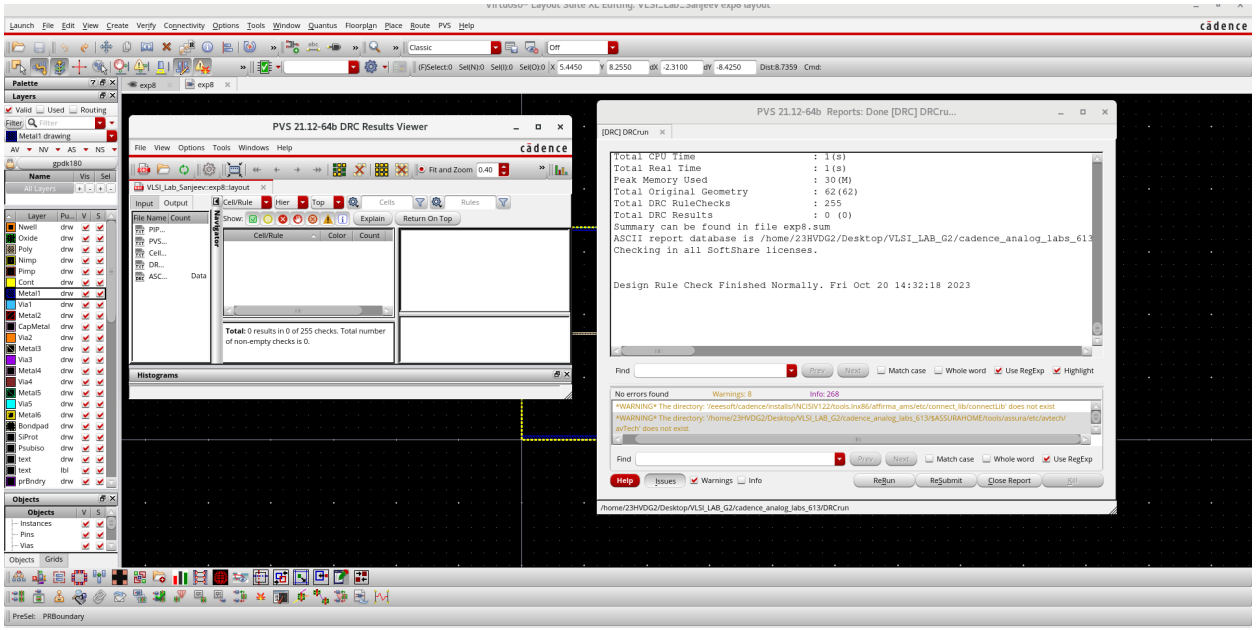


Layout:

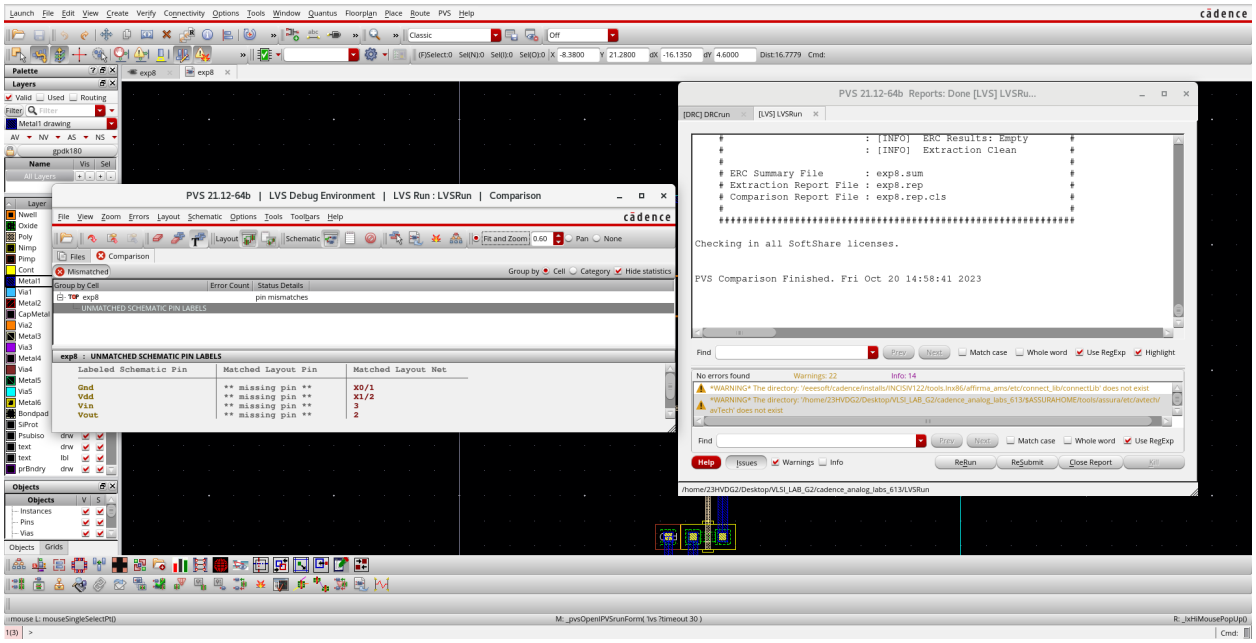


Simulation Results:

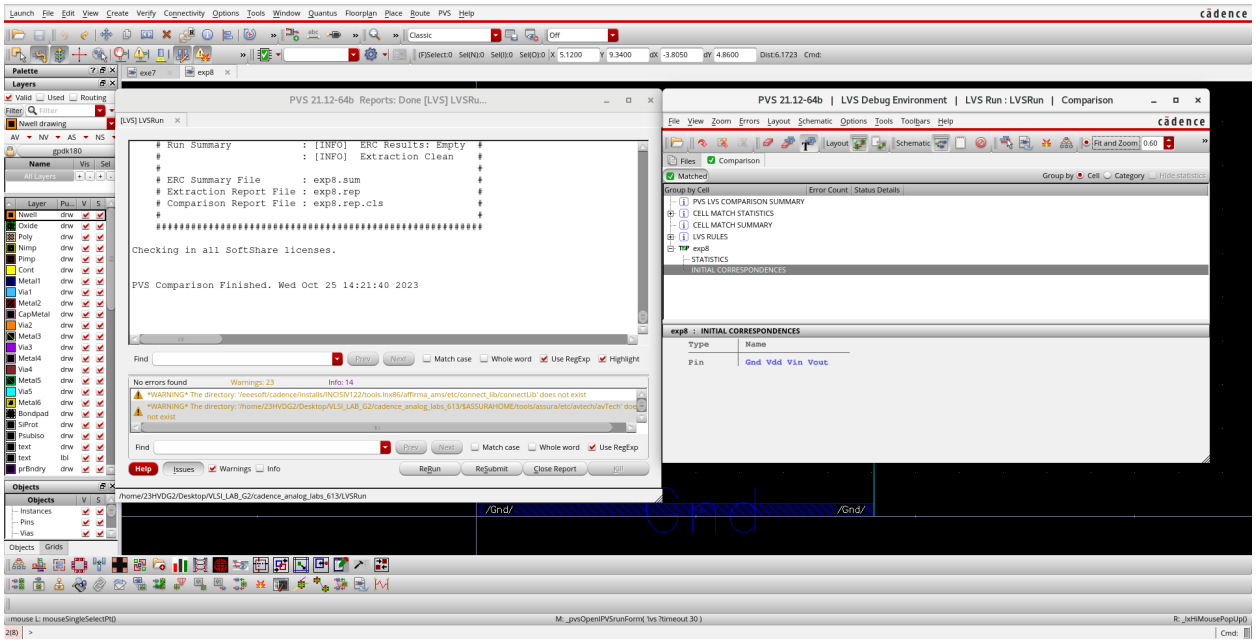
Results obtained for DRC:-



Results obtained for LVS (before pin matching):-



Results obtained for LVS (after pin matching):-



Inferences:

1. We need to insert a **P-Substrate** and an **N-Well** intersecting with NMOS and PMOS transistors respectively to prevent **latchup effects**.
2. The above layout has been verified to be abiding by **DRC** and **LVS rules**.

Conclusion:

In this experiment, we learnt how to design the **layout for a CMOS Inverter** using Cadence. Then we used the **DRC** and **LVS tools** to check if the layout is behaving correctly or not.