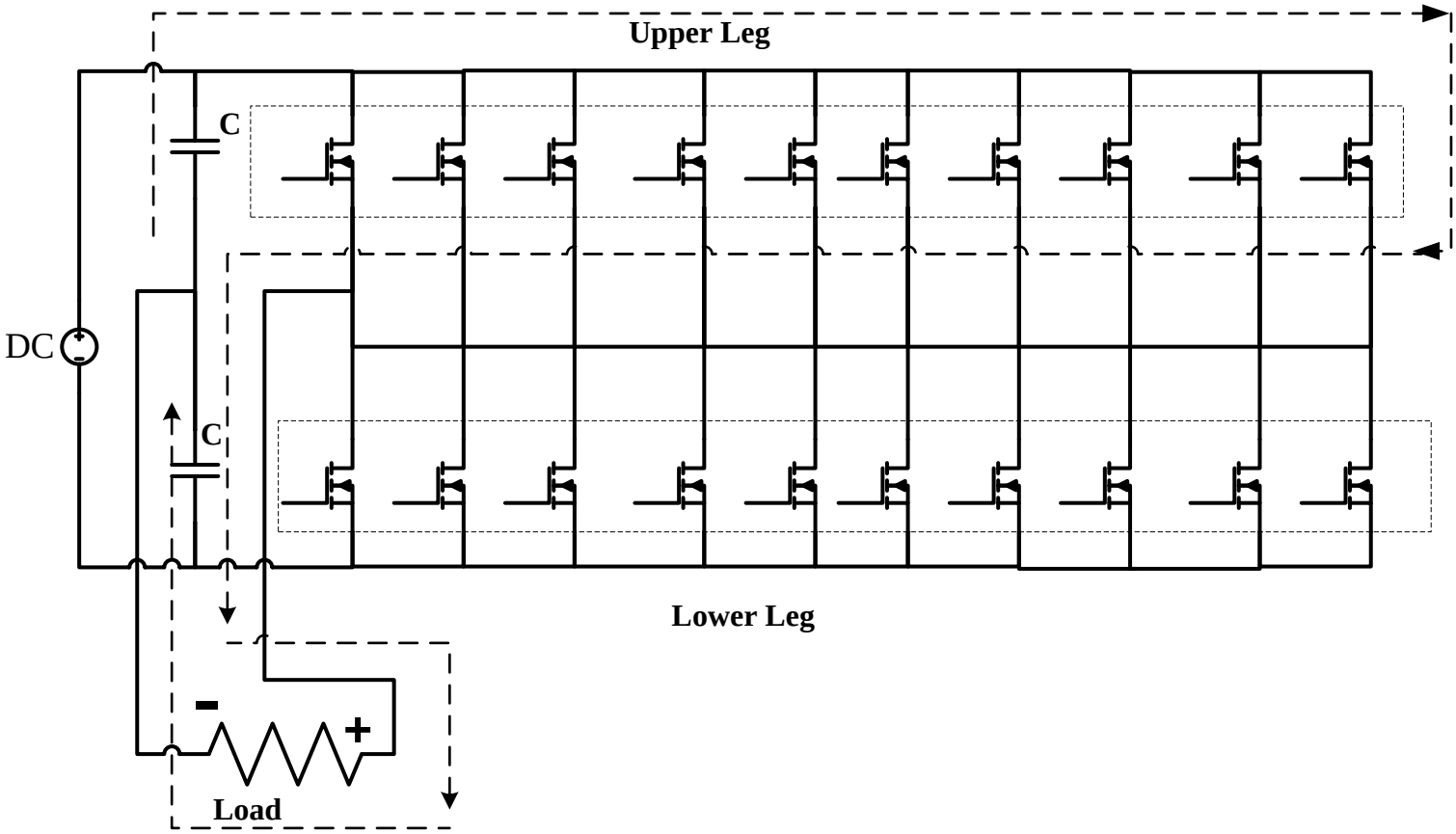
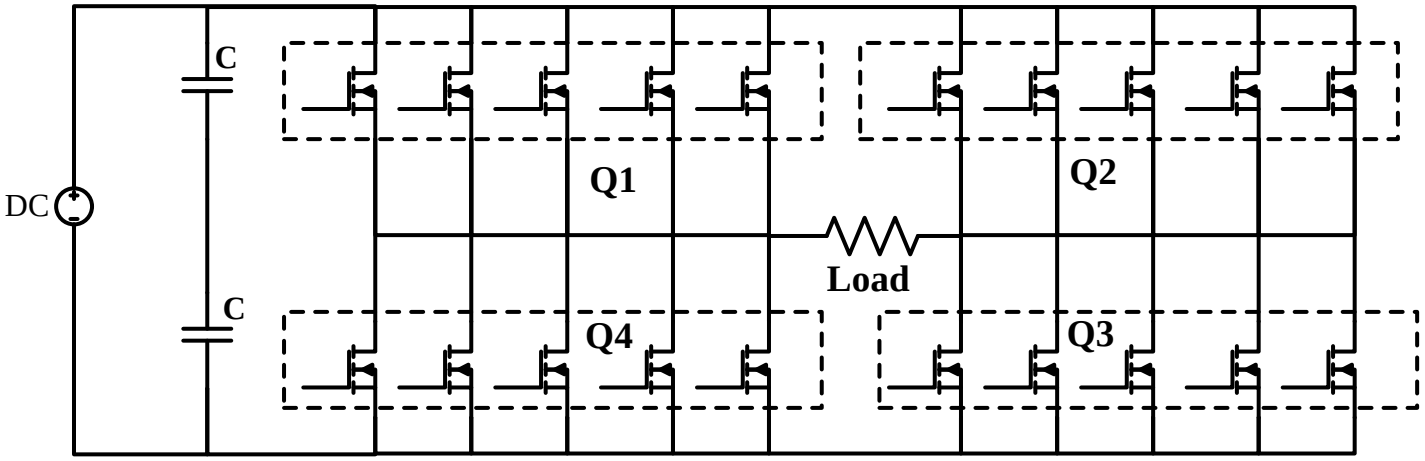


- This is Half Bridge Voltage Source Inverter
- Each MOSFET is rated 100 Watts.
- Upper leg and Lower Leg both has ten MOSFETs each, so total power dissipation of both legs is 2000 Watt.
- During Power Half Cycle, the current flows in direction shown. The Upper leg conducts, ten MOSFETs in parallel can dissipate 1000 Watt.
- During negative half cycle Lower leg will conduct and current direction will reverse, power dissipation will be 1000 Watt.
- In this way, both legs can supply 2000 Watt.



- Each MOSFET is rated 100 watt.
- Q1, Q2, Q3 and Q4 each has 500 watt rating, as each consists of 5 MOSFETs.
- Q1 and Q3 will conduct during positive half cycle. Q2 and Q4 conduct during negative half cycle.
- Q1 and Q3 are in series. The question is whether they will dissipate 500 Watt or 1000 watt? Same goes for the combination of Q2 and Q4.
- Is this configuration correct for supplying 2000 Watt to the load?