**Moore's Law definition:**

Moore's Law states that number of transistors on a microchip doubles every 2 years.

Moore's Law has now stopped being true because

As more transistors are added to a microchip the power consumption by the chip also increases by a great factor.

As more power is consumed more heat is generated which leads to increase in temperature of the chip. This is a big problem since if the temperature increases a lot there is of the chip melting.

According to the formula of dynamic power the power consumed can be decreased if voltage scaling is decreased.

But this is also an issue as the voltage scaling is limited because a minimum voltage (threshold voltage) is required to turn on transistors. But if the voltage swing is kept too low then noise and error correcting cannot be done anymore.

There is also another issue of power leakage where the size of the transistor is so small and the insulator is so thin that it is not able to prevent leaking of charge from one conductor to another which leads to heating and rise in temperature of the transistors. There is no way we can prevent this at least not by changing voltage scaling.