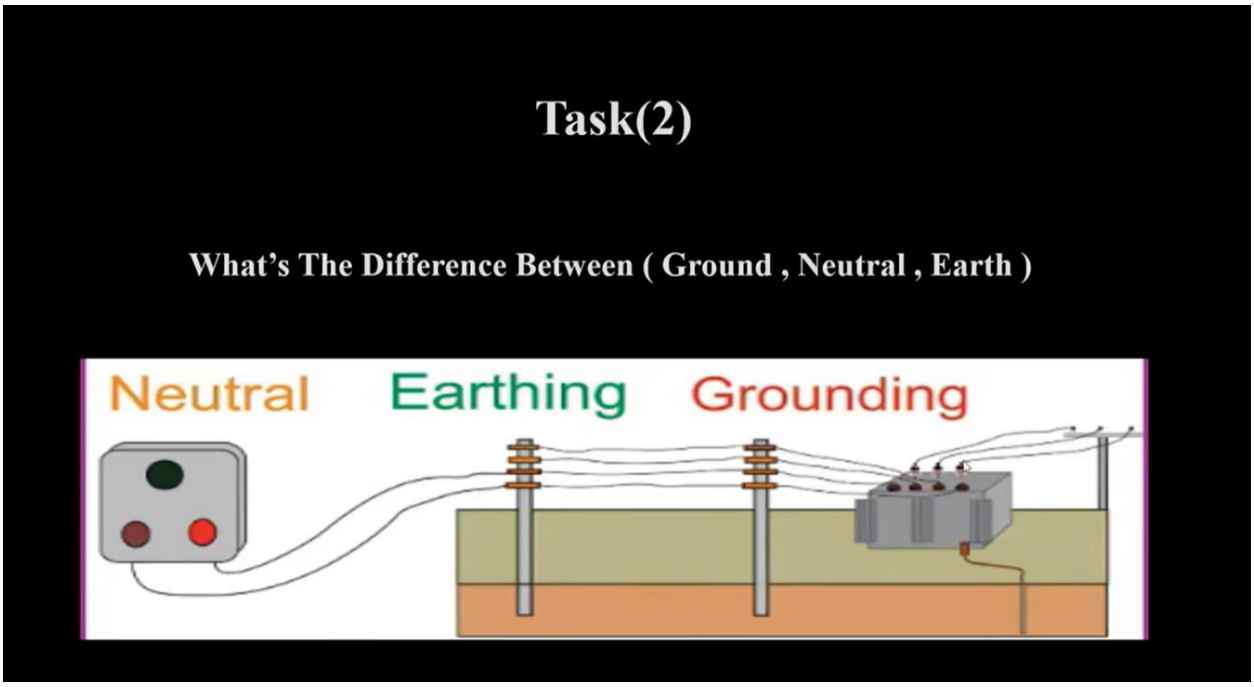

1. **Neutral**
    - **What it does:** Neutral wire is the drain pipe that carries it back to the source. Without it, your device won't turn on because the loop isn't complete.
    - **Is it safe?** Usually, yes, but it carries current, so you shouldn't touch it!
2. **Grounding**
    - **What it does:** It connects the power source to the ground. Its main job is to keep the voltage steady and protect the *grid* from things like lightning strikes. It's about protecting the **machinery**.
3. **Earthing**
    - **What it does:** It connects the metal casing of your washing machine or fridge to the earth. Its main job is to protect **YOU**. If a live wire comes loose and touches the metal case, the electricity goes down the earth wire instead of going through you.

1. Circuit Breaker

- **What it does:** It watches for two things: **Overload** & **Short Circuit**.
- **Reaction to Overload:** It trips automatically to stop the wires from melting.
- **After it trips (Reusability): Reusable.** You just walk to the panel and flip the switch back on. No need to buy anything new.

2. Thermal Overload Relay

- **What it does:** It is designed specifically for **Electric Motors**. It senses if a motor is working too hard and heating up.
- **Reaction to Overload:** Inside, there are metal strips that bend when they get hot. If they bend too much, they cut the power to save the motor from burning out.
- **After it trips (Reusability): Reusable.** Once the motor cools down, you can usually press a "Reset" button on the device to start again.

3. Fuse

- **What it does:** It is a thin piece of wire designed to be the weak link. It protects mostly against **Short Circuits**.
- **Reaction to Overload:** If the current gets too high, the wire inside literally melts and snaps. to save the rest of the circuit.
- **After it trips (Reusability): NOT Reusable.** Once a fuse blows, it is dead. You must throw it away and buy a new one.