1. With Internet of things rapidly increasing and data constantly being gathered, microcontrollers are a huge part of the modern world.
2. A microcontroller is a single Integrated Circuit that is typically used for a specific application and designed to implement certain tasks.
3. They are built into products and devices that must be automatically controlled in certain situations, like appliances.
4. Microcontroller input, processes this information, and outputs a certain action based on the information gathered.
5. Microcontrollers usually operate at lower speeds, around the 1MHz to 200 MHz range.
6. They need to be designed to consume less power because they are embedded inside other devices that can have greater power consumptions in other areas.
7. A MCU would commonly be found controlling basic but would offer pointlessly limited function in a more complex machine such as a full computer.
8. The microprocessor is the central unit of a computer system that performs arithmetic and logic operations, which generally include adding, subtracting, transferring numbers from one area to another, and comparing two numbers.
9. It's a programmable, multipurpose device that incorporates the functions of a CPU on a single IC.