AVR is just an integrated circuit microchip, made by Atmel. It looks something like this:

Although they can be used by themselves, it takes a bit of hardware experience and some support components.

The Arduino is an AVR processor running special code that lets you use the Arduino environment to program and upload code easily. All you need is a USB cable to program and communicate with it.
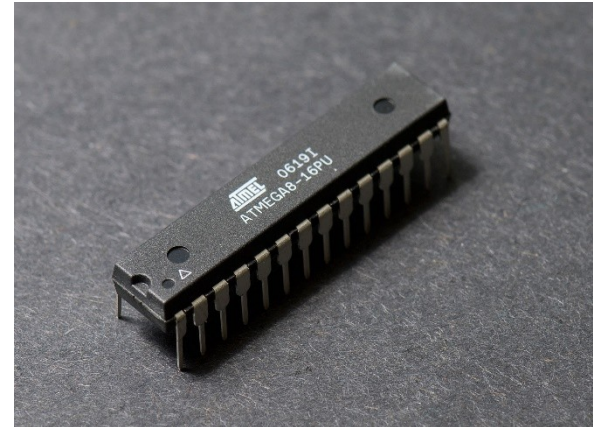
The ATmega328 plugs into a socket in the Arduino Uno as shown in the image below. There are some Arduino Uno boards that have a surface mount ATmega328 chip. In this case it is a small square chip soldered on top of the Arduino.

ATmega328 AVR Microcontroller

On an Arduino, the microcontroller is the main component that does all of the work. When an Arduino sketch is loaded to the Arduino it is actually loaded to memory inside the microcontroller chip. The microcontroller then runs or executes the sketch when the Arduino is powered up or reset after programming.

AVR types : -

ATMega328 - Microcontroller with Bootloader for UNO

LE 50.00

ATMega328P (AVR 28 Pin 20MHz 32K)

LE 45.00

My Opinion I prefer Arduino as we may have problems with AVR ,Because its pins are not enough for large number of sensors ,Although Arduino is more expensive