

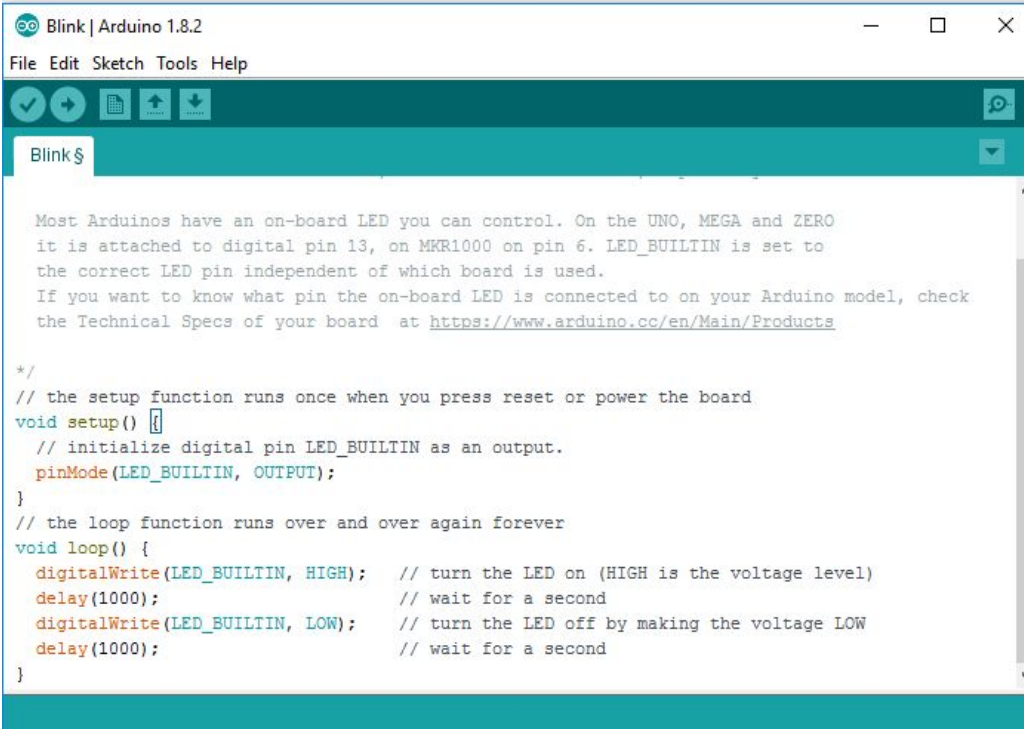
## Arduino structure

- 1 Sketch is the name of a program you run on the arduino
2. Setup and Loop are the two functions that are built into it
3. Define variables or data structures above step function
4. Loop is the logics, base on the conditions change,

Summary : setup and loop are the two basic functions

5. Compile the code before sending it to the arduino
6. Send to the arduino,
7. Run the initialization, setup and then loop

Test: Let's try it and run Blink

A screenshot of the Arduino IDE interface. The window title is "Blink | Arduino 1.8.2". The menu bar includes "File", "Edit", "Sketch", "Tools", and "Help". Below the menu bar is a toolbar with icons for check, undo, redo, save, and upload. The main text area shows the Blink sketch code, which includes a comment block explaining the on-board LED pin configuration and the code for the setup and loop functions. The code uses digitalWrite, delay, and pinMode functions to control the LED.

```
Most Arduinos have an on-board LED you can control. On the UNO, MEGA and ZERO
it is attached to digital pin 13, on MKR1000 on pin 6. LED_BUILTIN is set to
the correct LED pin independent of which board is used.
If you want to know what pin the on-board LED is connected to on your Arduino model, check
the Technical Specs of your board at https://www.arduino.cc/en/Main/Products

*/
// the setup function runs once when you press reset or power the board
void setup() {
  // initialize digital pin LED_BUILTIN as an output.
  pinMode(LED_BUILTIN, OUTPUT);
}
// the loop function runs over and over again forever
void loop() {
  digitalWrite(LED_BUILTIN, HIGH); // turn the LED on (HIGH is the voltage level)
  delay(1000); // wait for a second
  digitalWrite(LED_BUILTIN, LOW); // turn the LED off by making the voltage LOW
  delay(1000); // wait for a second
}
```

Control structure = if statements      Data structures    List & Arrays