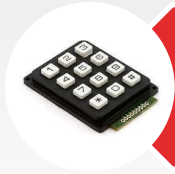# Arduino & Arduino Compatible Boards
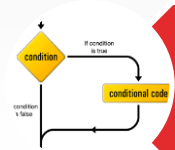
BIG 6 CONCEPTS

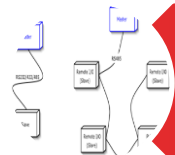digitalWrite()

analogWrite()

digitalRead()

if() statements / Boolean

analogRead()

Serial communication

Let's get to coding…

Project #1 – Blink

"Hello World" of Physical Computing

Psuedo-code – how should this work?

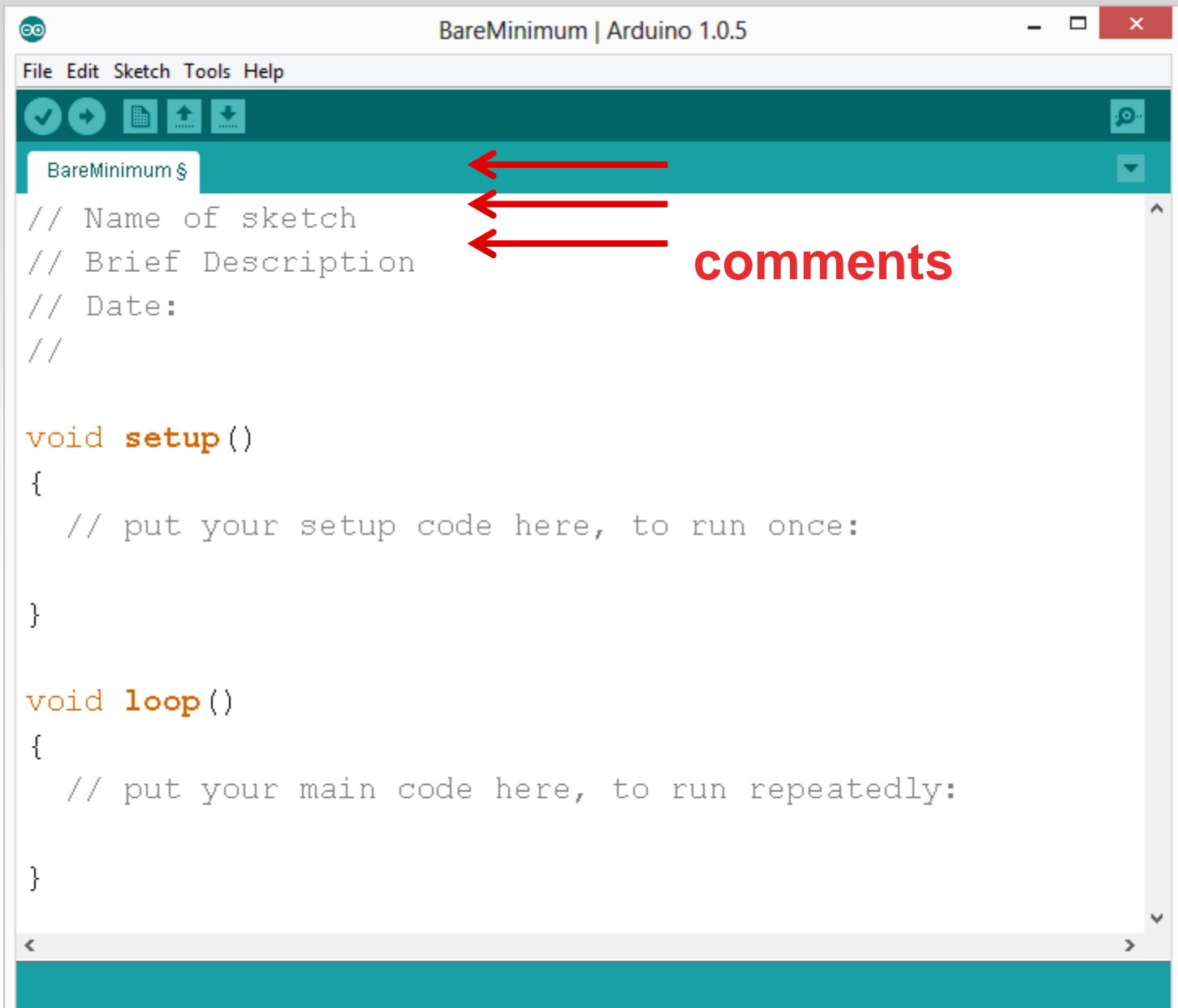Turn LED ON → Wait → Turn LED OFF → Wait → Rinse & Repeat

Comments, Comments, Comments

Comments are for you – the programmer and your friends…or anyone else human that might read your code.

```
// this is for single line comments
// it's good to put a description at the
   top and before anything 'tricky'
/* this is for multi-line comments
   Like this…
   And this….
*/
```

comments

Code shown in the Arduino IDE window:

```
// Name of sketch
// Brief Description
// Date:
//

void setup()
{
  // put your setup code here, to run once:

}

void loop()
{
  // put your main code here, to run repeatedly:

}
```

Three commands to know…

```
pinMode(pin, INPUT/OUTPUT);
   ex: pinMode(13, OUTPUT);


digitalWrite(pin, HIGH/LOW);
   ex: digitalWrite(13, HIGH);


delay(time_ms);
   ex: delay(2500); // delay of 2.5 sec.

// NOTE: -> commands are CASE-sensitive
```