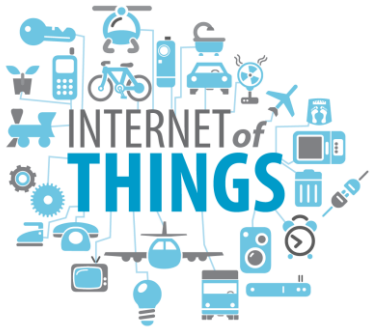
UNIVERSITY OF SCIENCE - VNUHCM
Faculty of Information Technology

INTERNET OF THINGS

1.1

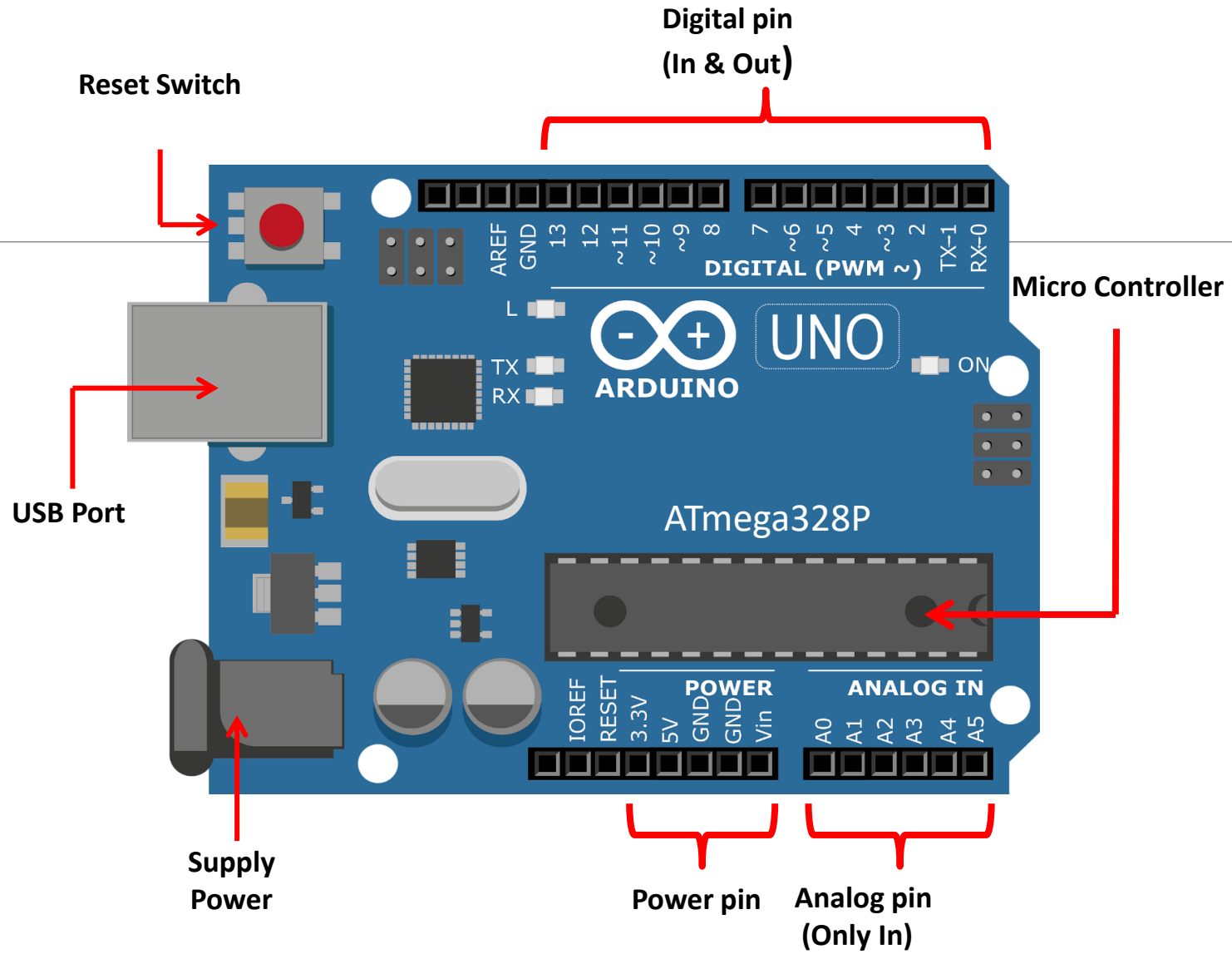
INTRODUCE TO THE ARDUINO



Content

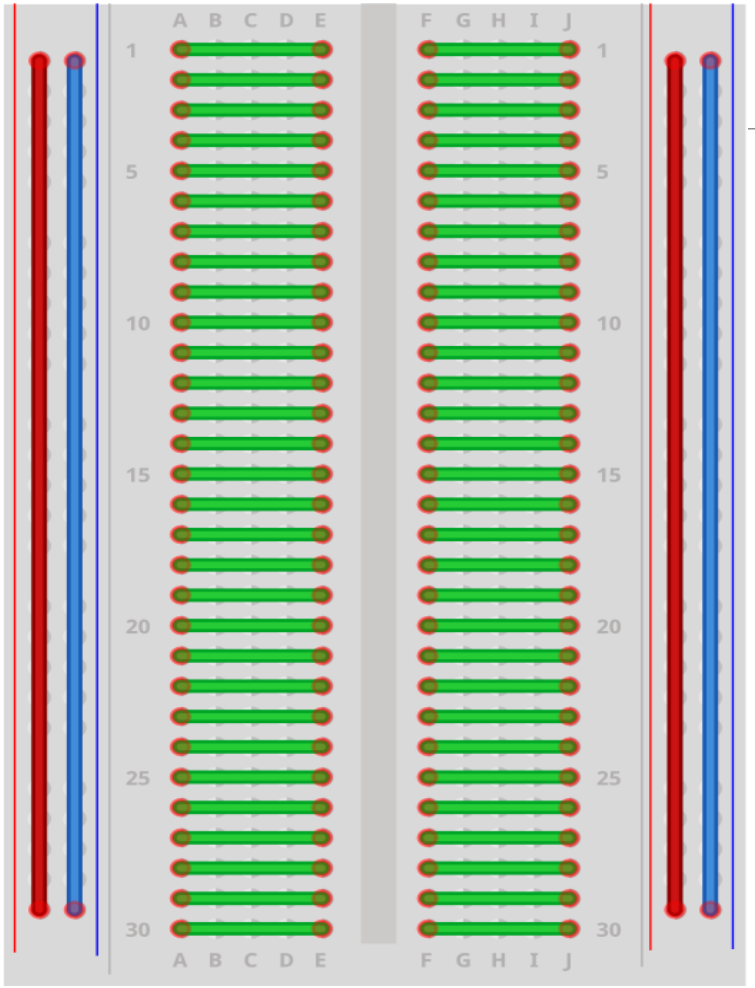
1. Arduino board
2. Basic electronic devices
3. Arduino IDE
4. The first program “Hello World”

Arduino board


Digital pin
(In & Out)
Reset Switch
Micro Controller
USB Port
Supply
Power
Power pin
Analog pin
(Only In)
DIGITAL (PWM ~)
POWER
ANALOG IN
ARDUINO
UNO
ATmega328P

Electronic devices

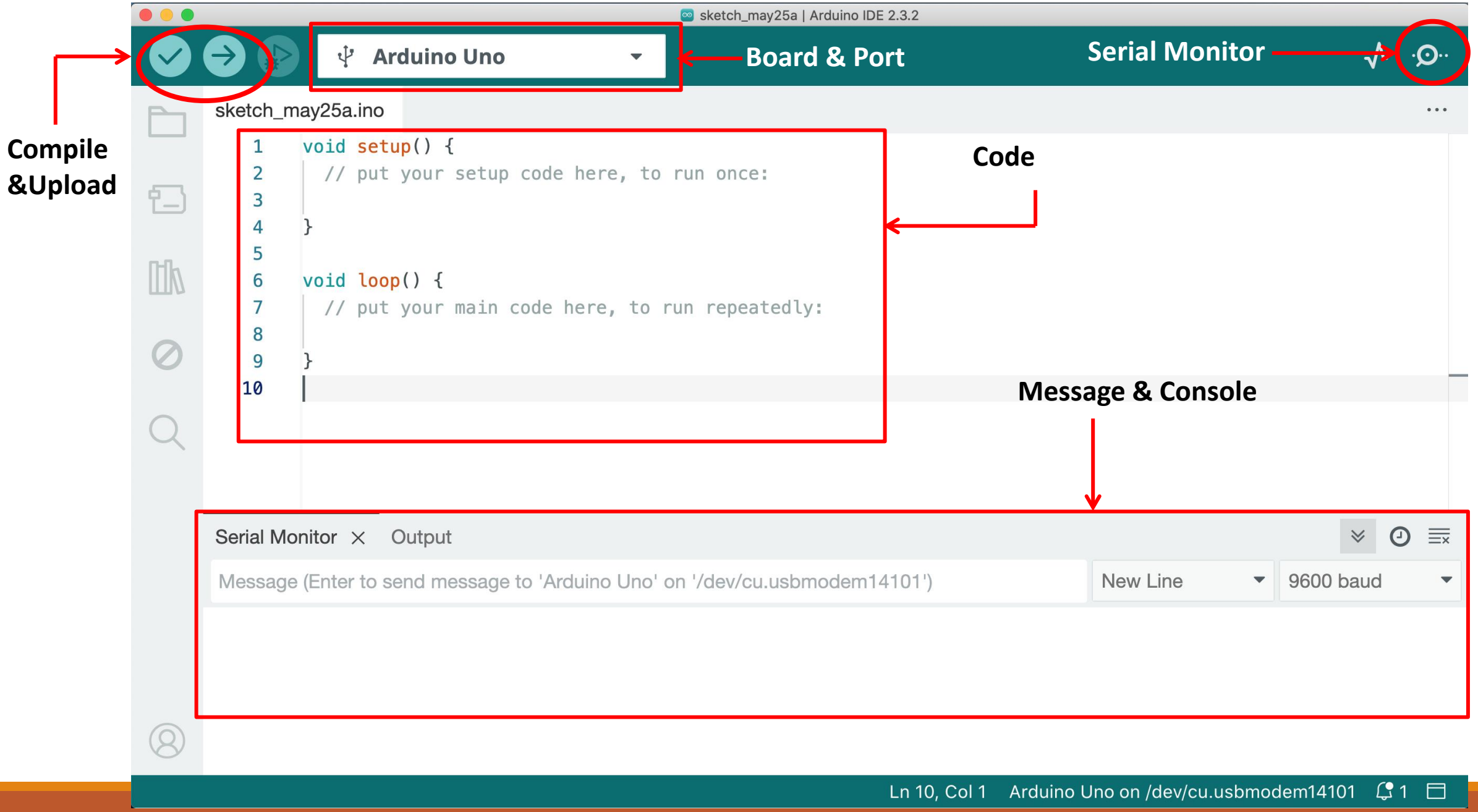
Test board – Bread board



< Bread Board >

< Inside of Bread Board >

Arduino IDE


sketch_may25a | Arduino IDE 2.3.2
Arduino Uno
Board & Port
Serial Monitor
Compile
&Upload
sketch_may25a.ino
1 void setup() {
2 // put your setup code here, to run once:
3
4 }
5
6 void loop() {
7 // put your main code here, to run repeatedly:
8
9 }
10
Code
Message & Console
Serial Monitor
Output
Message (Enter to send message to 'Arduino Uno' on '/dev/cu.usbmodem14101')
New Line
9600 baud
Ln 10, Col 1
Arduino Uno on /dev/cu.usbmodem14101
1

```
> Hello world
```

The First Program

```
void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
}

void loop() {
  // put your main code here, to run repeatedly:
  Serial.println("Hello World");
  delay(1000);
}
```