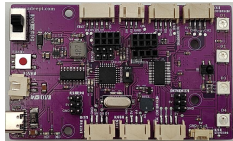



## Lesson 1 How to control the onboard LED

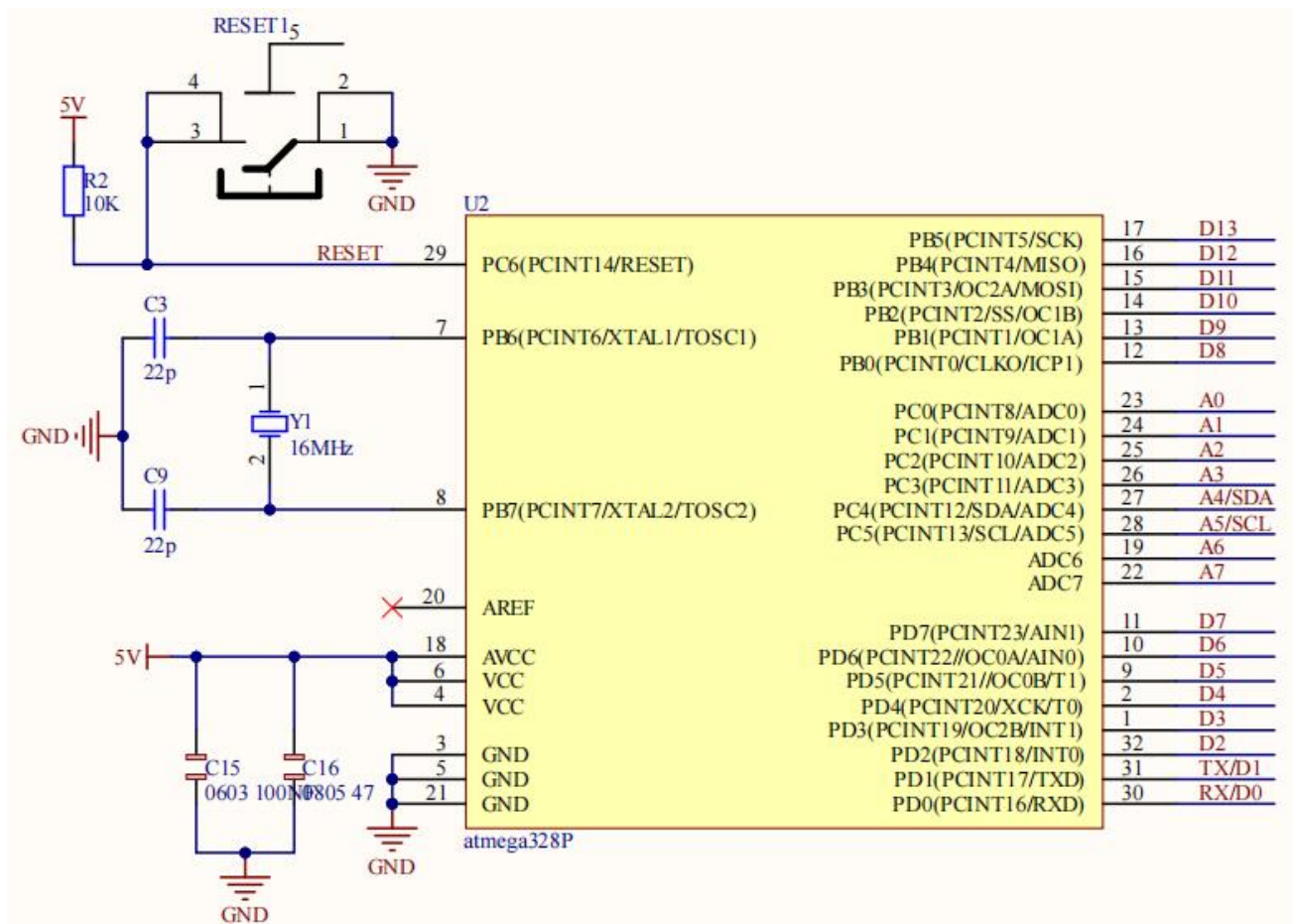
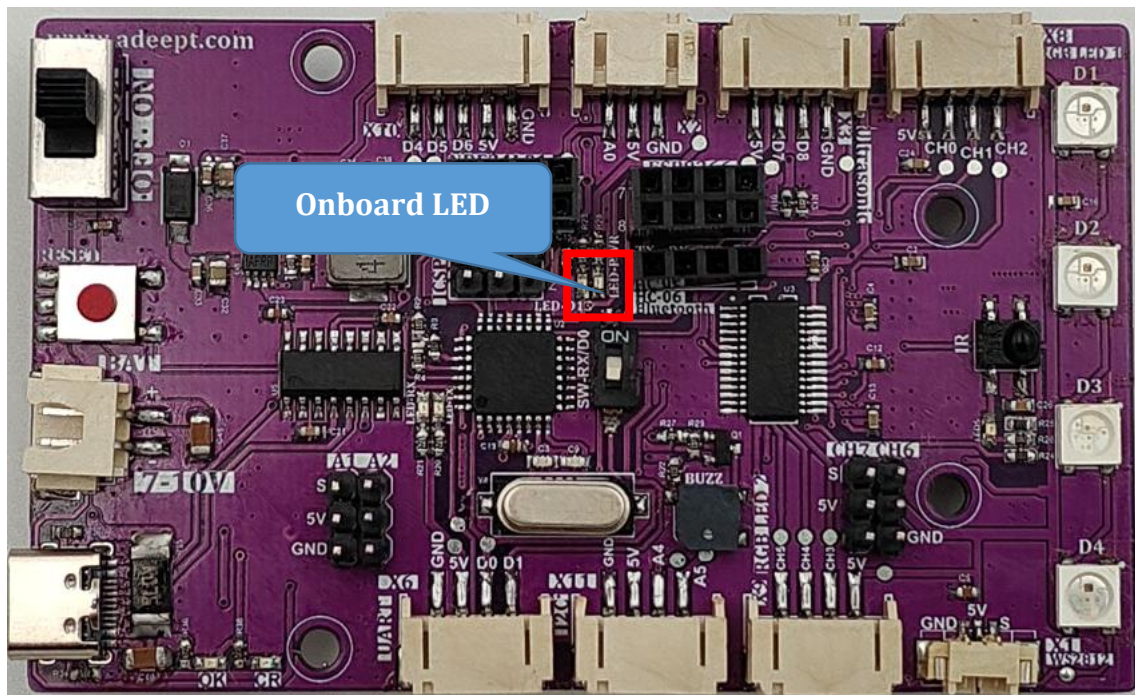
In this lesson, we will learn how to control the onboard LED.

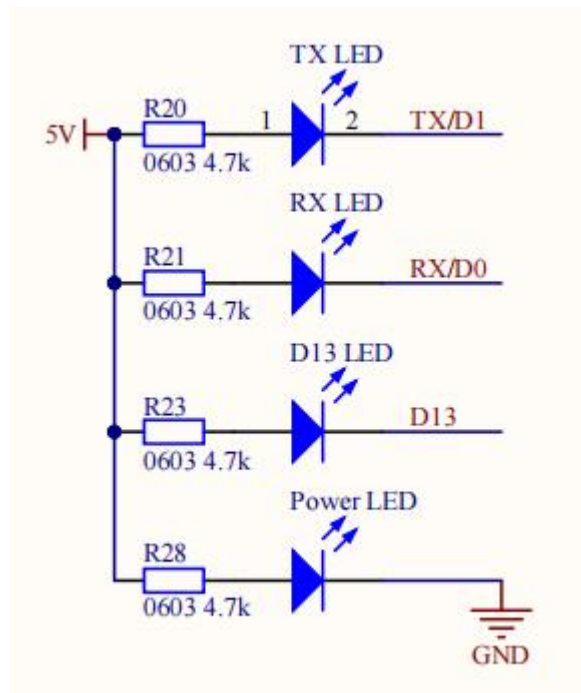
### 1.1 Components used in this course

Components	Quantity	Picture
Adeept Robot Control Board	1	
Type-C USB Cable	1	

### 1.2 The introduction of the onboard LED

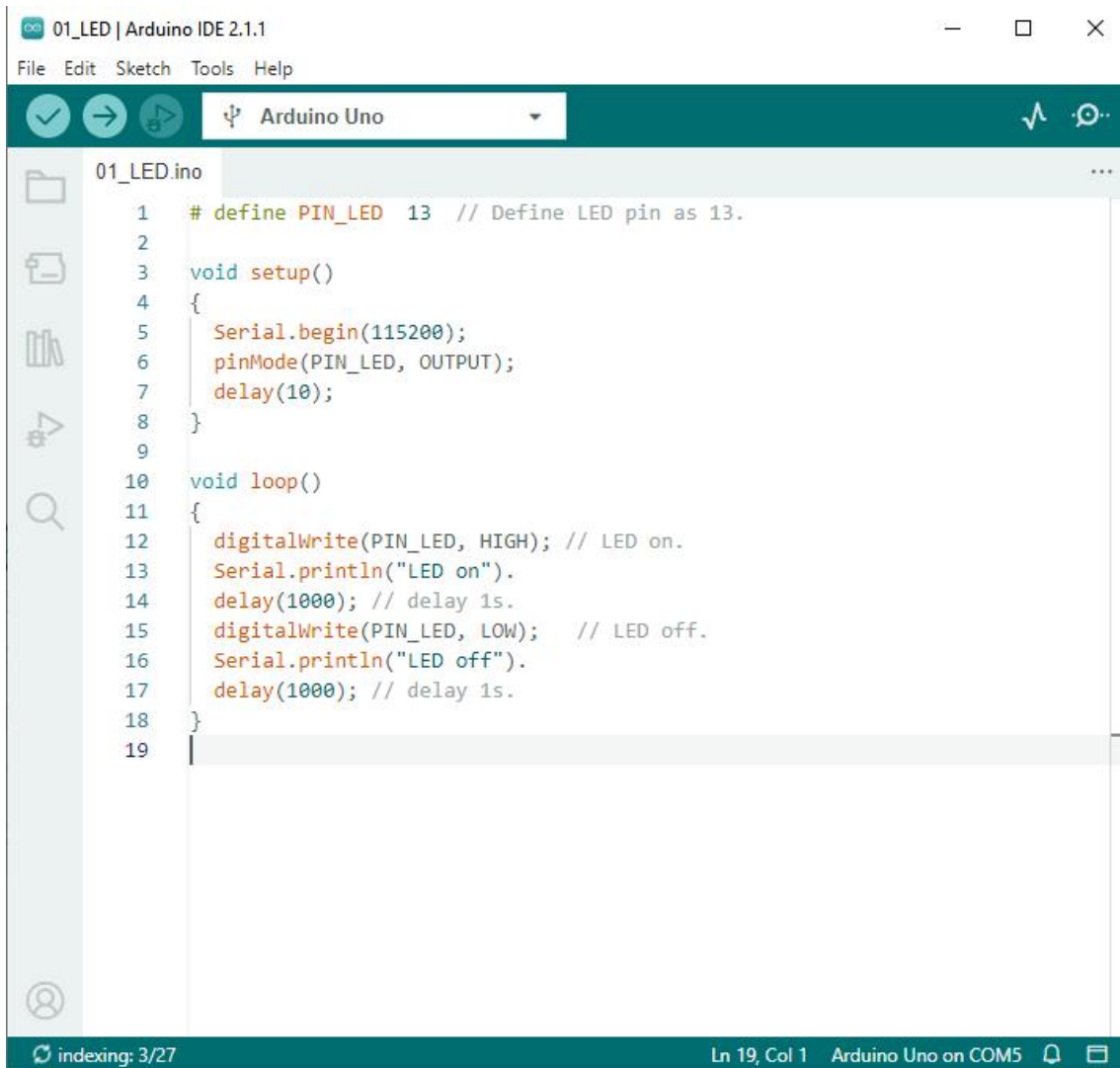
The onboard LED is connected to the D13 pin.





## 1.3 How to control Servo

1. Connect your computer and Adeept Robot Control Board (Arduino Board) with a USB cable.
2. Open "01\_LED" folder in ["/Code"](#), double-click "[01\\_LED.ino](#)".



```
01_LED.ino
1  # define PIN_LED 13 // Define LED pin as 13.
2
3  void setup()
4  {
5      Serial.begin(115200);
6      pinMode(PIN_LED, OUTPUT);
7      delay(10);
8  }
9
10 void loop()
11 {
12     digitalWrite(PIN_LED, HIGH); // LED on.
13     Serial.println("LED on");
14     delay(1000); // delay 1s.
15     digitalWrite(PIN_LED, LOW); // LED off.
16     Serial.println("LED off");
17     delay(1000); // delay 1s.
18 }
19
```

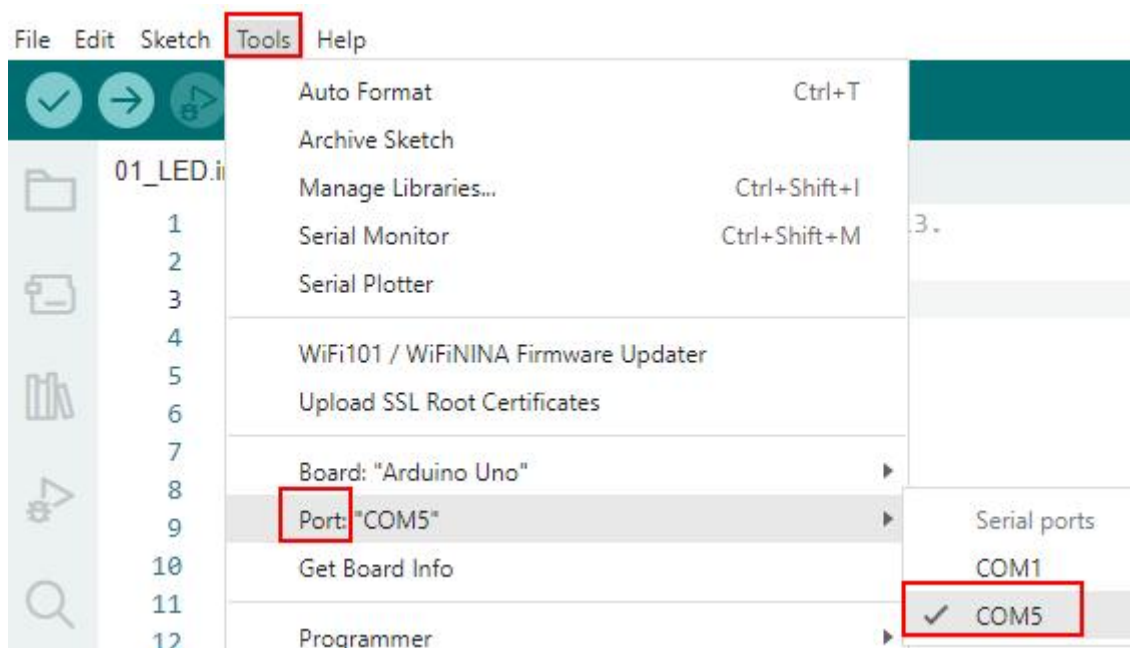
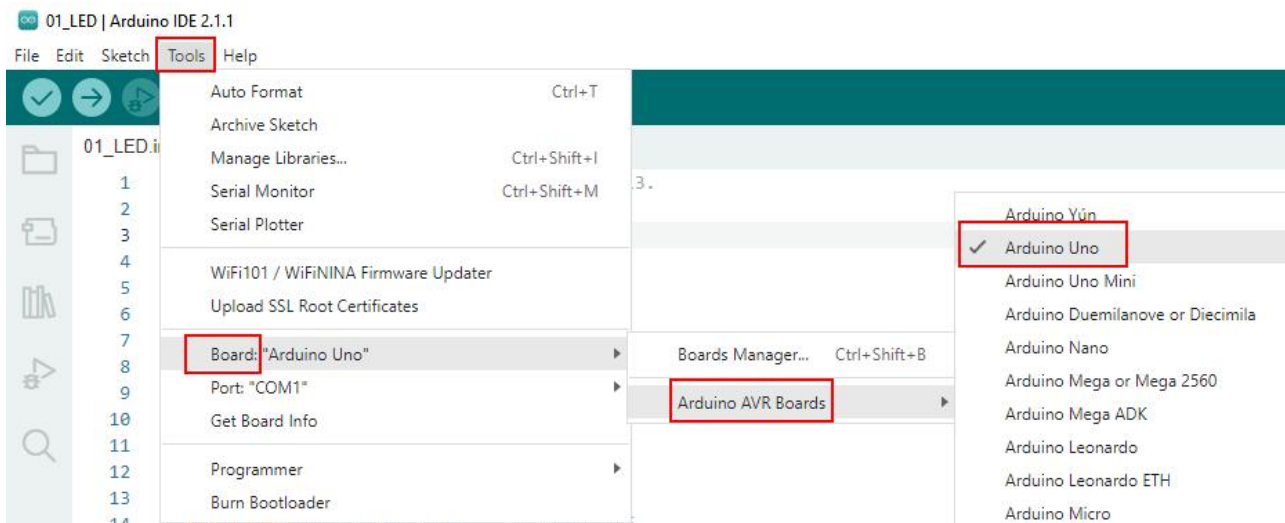
indexing: 3/27      Ln 19, Col 1    Arduino Uno on COM5


3. Select development board and serial port.

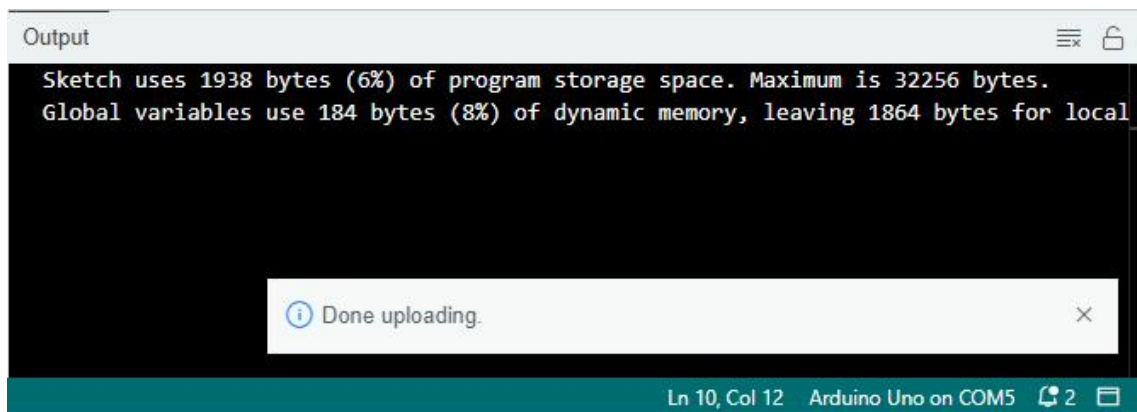
Board: Tools--->Board--->Arduino AVR Boards--->Arduino Uno

Port: Tools --->Port--->COMx

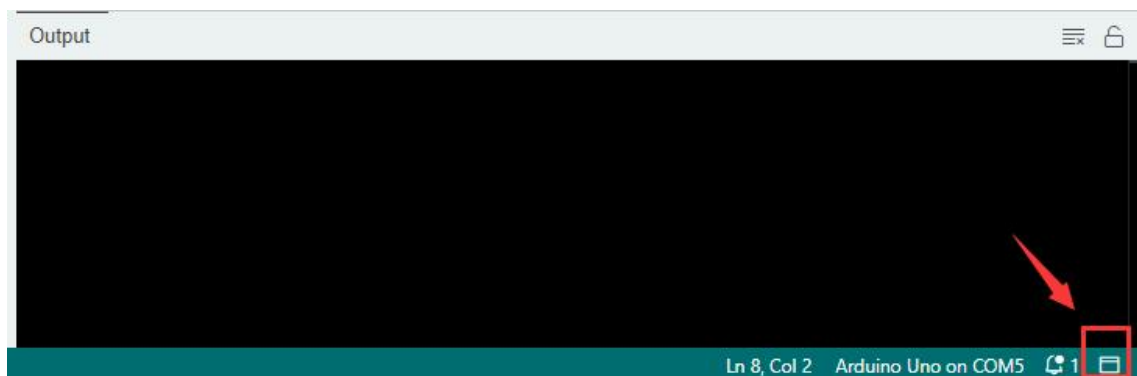
Note: The port number will be different in different computers.



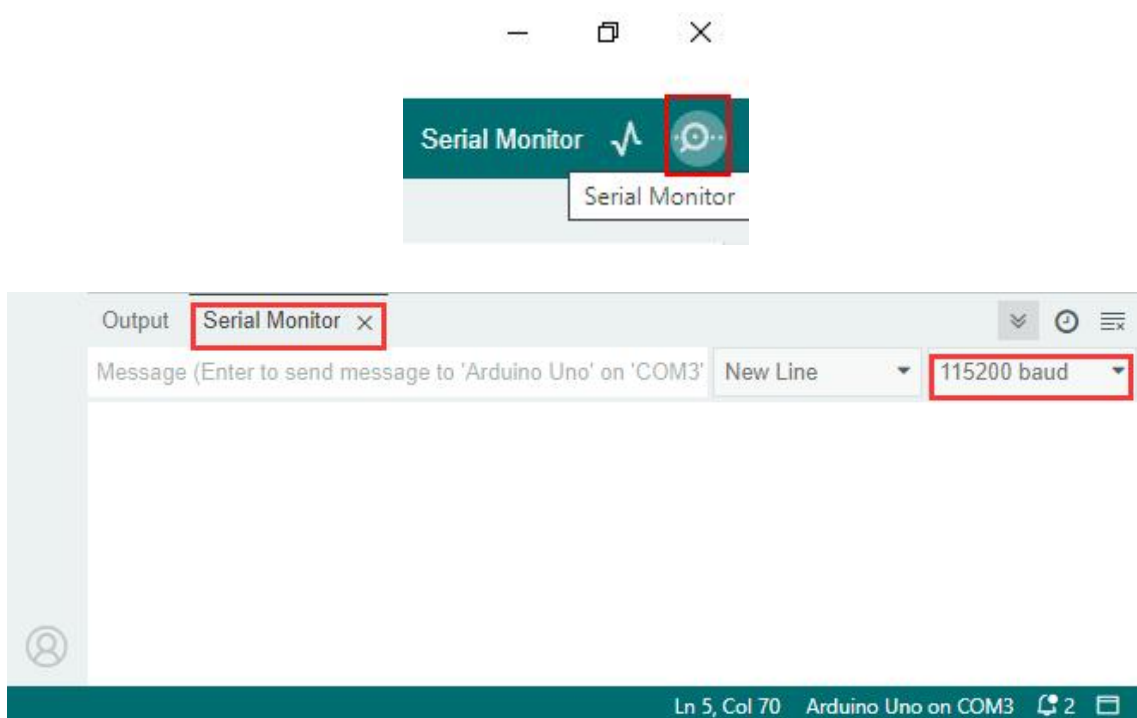
4. After opening, click  to upload the code program to the Arduino. If there is no error warning in the console below, it means that the Upload is successful.



Clicking the icon again will hide the Output bar.



5. Click Serial Monitor, Set the baud rate as 115200.





6. After successfully running the program, the onboard LED will blink once every 1s.

## 1.4 Code

```
1. # define PIN_LED 13 // Define LED pin as 13.
2.
3. void setup()
4. {
5.     Serial.begin(115200);
6.     pinMode(PIN_LED, OUTPUT);
7.     delay(10);
8. }
9.
10. void loop()
11. {
12.     digitalWrite(PIN_LED, HIGH); // LED on.
13.     Serial.println("LED on").
14.     delay(1000); // delay 1s.
15.     digitalWrite(PIN_LED, LOW); // LED off.
16.     Serial.println("LED off").
17.     delay(1000); // delay 1s.
18. }
```