

Lecture 02

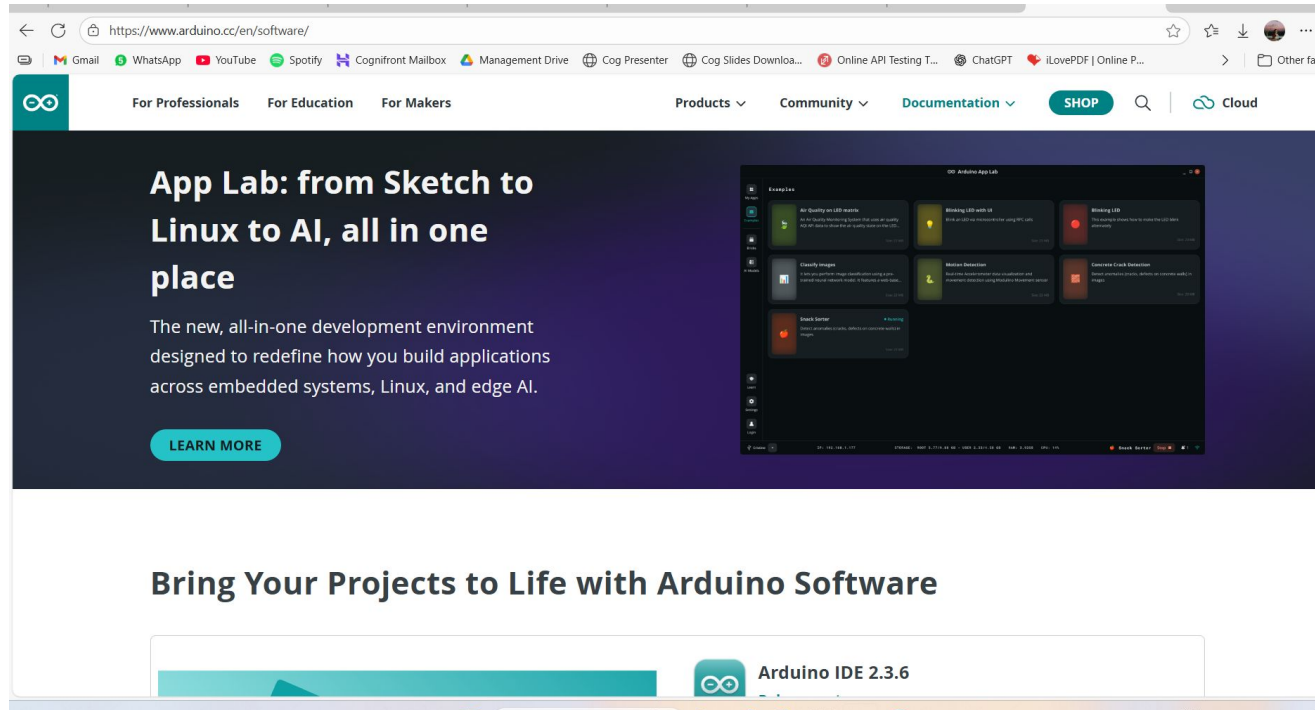


Arduino IDE

Cognifront*

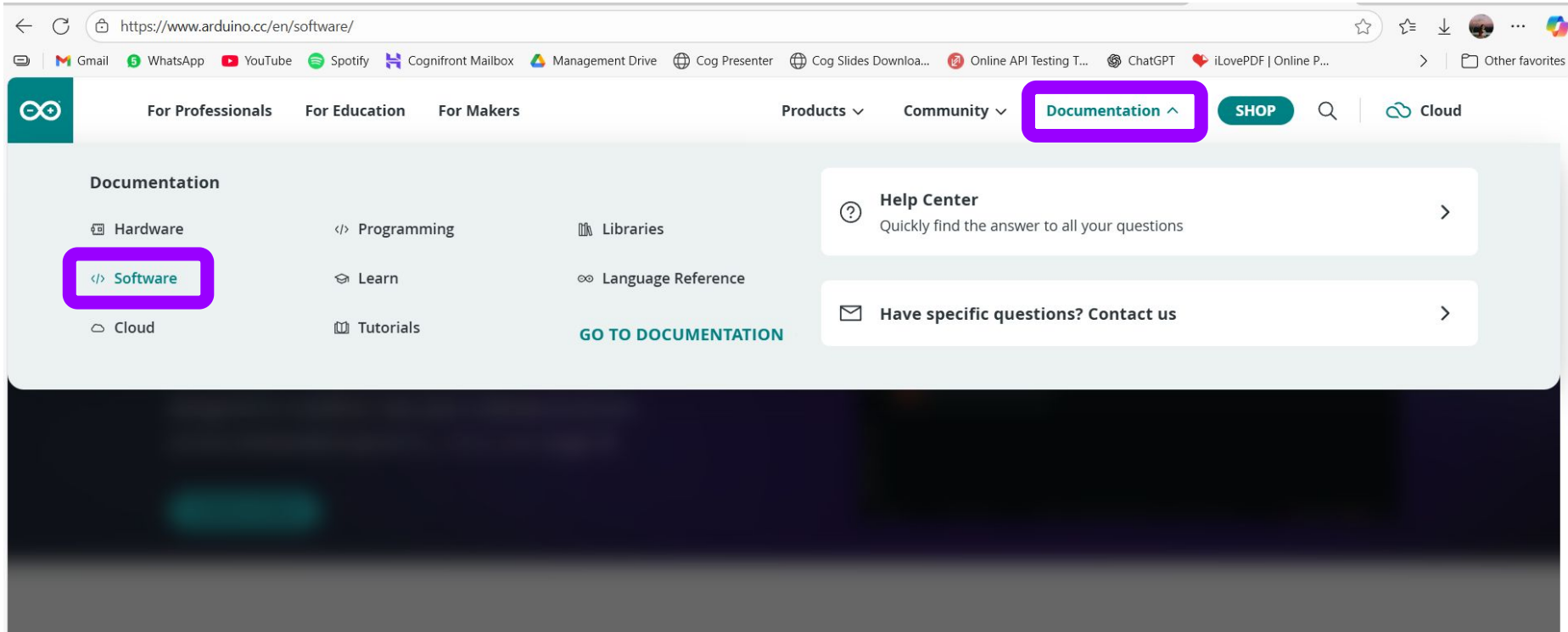
Arduino IDE (Software)

- Open <https://www.arduino.cc> in your browser



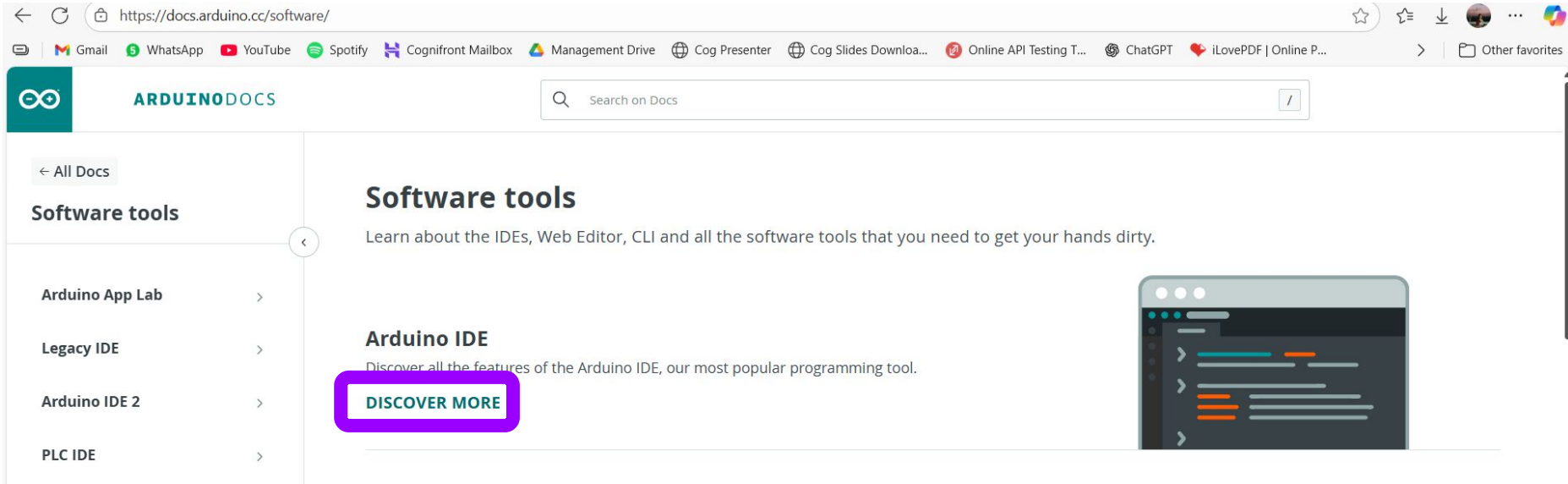
Arduino IDE (Software)

Click Documentation > Software



Arduino IDE (Software)

Click Discover More



The screenshot shows a web browser at the URL <https://docs.arduino.cc/software/>. The page features the Arduino Docs logo and a search bar. On the left, a sidebar lists software tools: All Docs, Software tools, Arduino App Lab, Legacy IDE, Arduino IDE 2, and PLC IDE. The main content area is titled 'Software tools' and includes a sub-header 'Arduino IDE' with a description: 'Discover all the features of the Arduino IDE, our most popular programming tool.' A purple box highlights the 'DISCOVER MORE' link. An illustration of the Arduino IDE interface is shown on the right.

← All Docs

Software tools

Arduino App Lab >

Legacy IDE >

Arduino IDE 2 >

PLC IDE >

Software tools

Learn about the IDEs, Web Editor, CLI and all the software tools that you need to get your hands dirty.

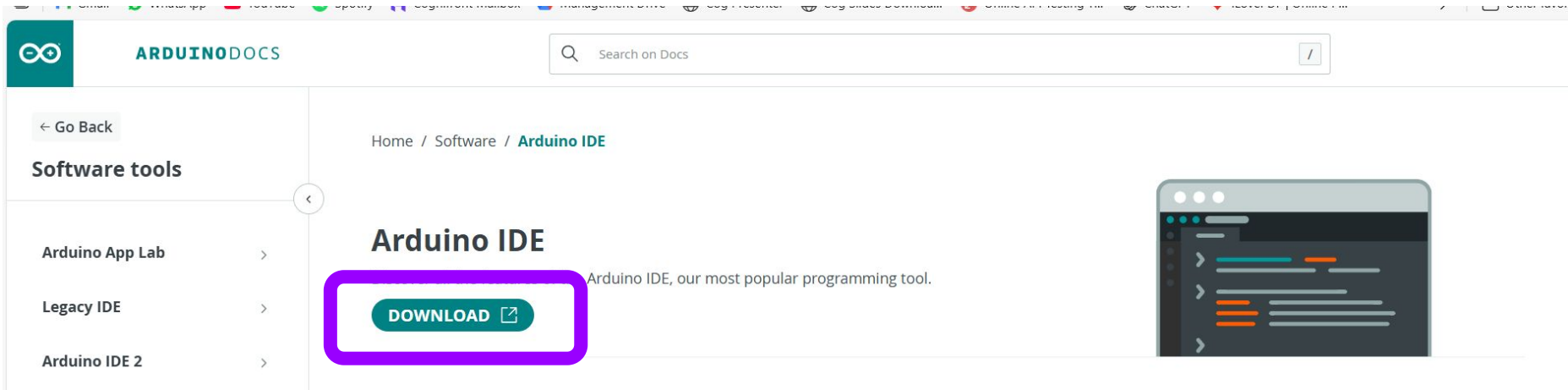
Arduino IDE

Discover all the features of the Arduino IDE, our most popular programming tool.

DISCOVER MORE

Arduino IDE (Software)

Click Download



The screenshot shows the Arduino IDE download page on the Arduino Docs website. The page has a teal header with the Arduino logo and 'ARDUINODOCS' text. A search bar is located in the top right. On the left, a sidebar lists 'Software tools' with a 'Go Back' link. The main content area features the title 'Arduino IDE' and a description: 'Arduino IDE, our most popular programming tool.' A prominent teal 'DOWNLOAD' button with an external link icon is highlighted by a thick purple rectangular border. To the right of the text is an illustration of a code editor window with syntax-highlighted code.

ARDUINODOCS

Search on Docs

← Go Back

Software tools

Home / Software / **Arduino IDE**

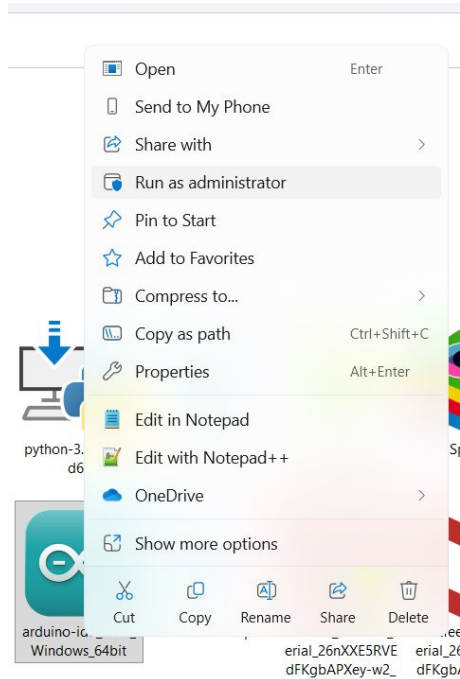
Arduino IDE

Arduino IDE, our most popular programming tool.

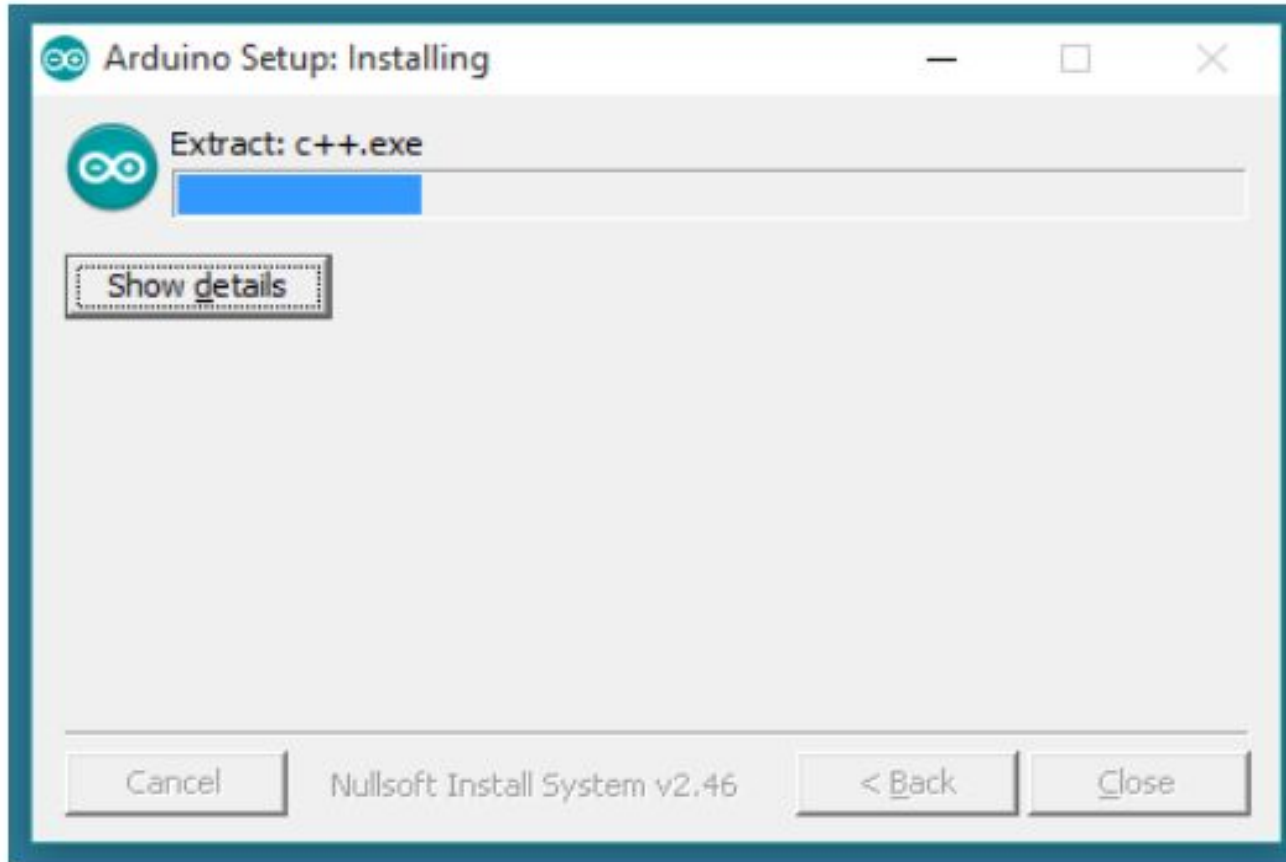
DOWNLOAD 

Arduino IDE (Software)

Click Install > Allow All Permissoins



Arduino IDE (Software)



Arduino IDE (Software)

- The Arduino Software or an IDE(**Integrated Development Environment**),
 - Text editor,
 - Toolbar,
 - Compiler,
 - Serial Monitor



sketch_jul20a.S

`void setup()`

```
{  
  // put your setup code here, to run once:  
}
```

`void loop()`

```
{  
  // put your main code here, to run repeatedly:  
}
```

Two **compulsory**
functions without which
program **will not run**



sketch_dec05a\$

```
void setup()
```

```
{
```

```
// put your setup code here, to run once:
```

```
}
```

```
void loop()
```

```
{
```

```
// put your main code here, to run repeatedly:
```

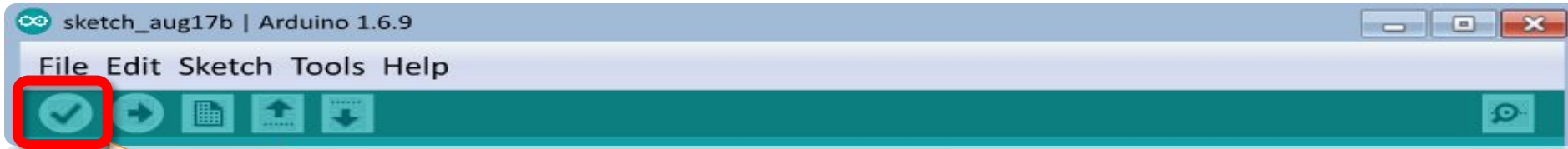
```
,
```



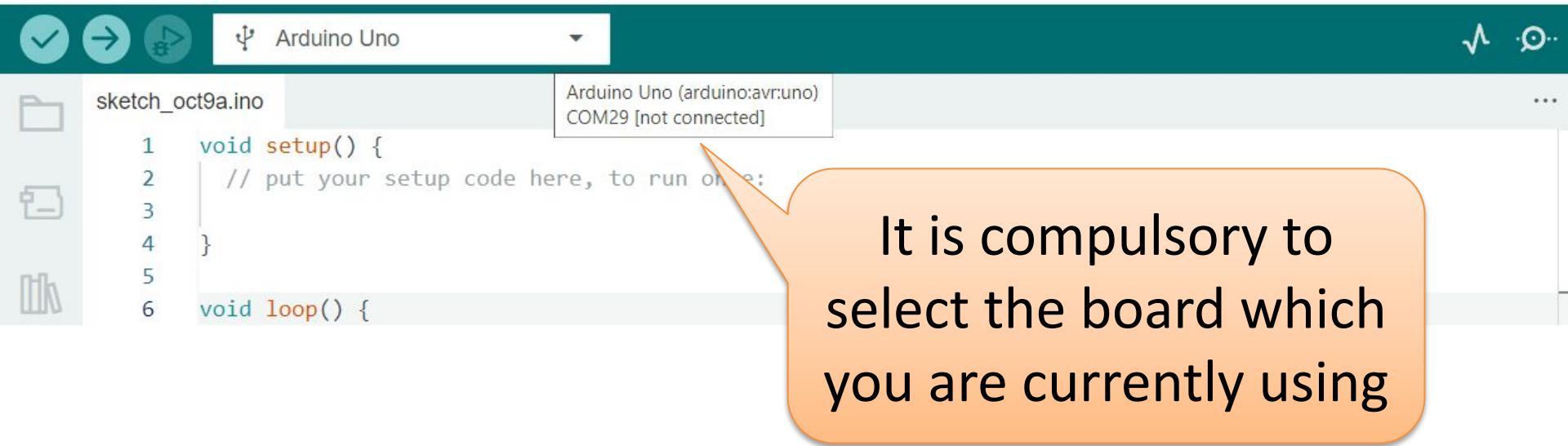
sketch_dec05a \$

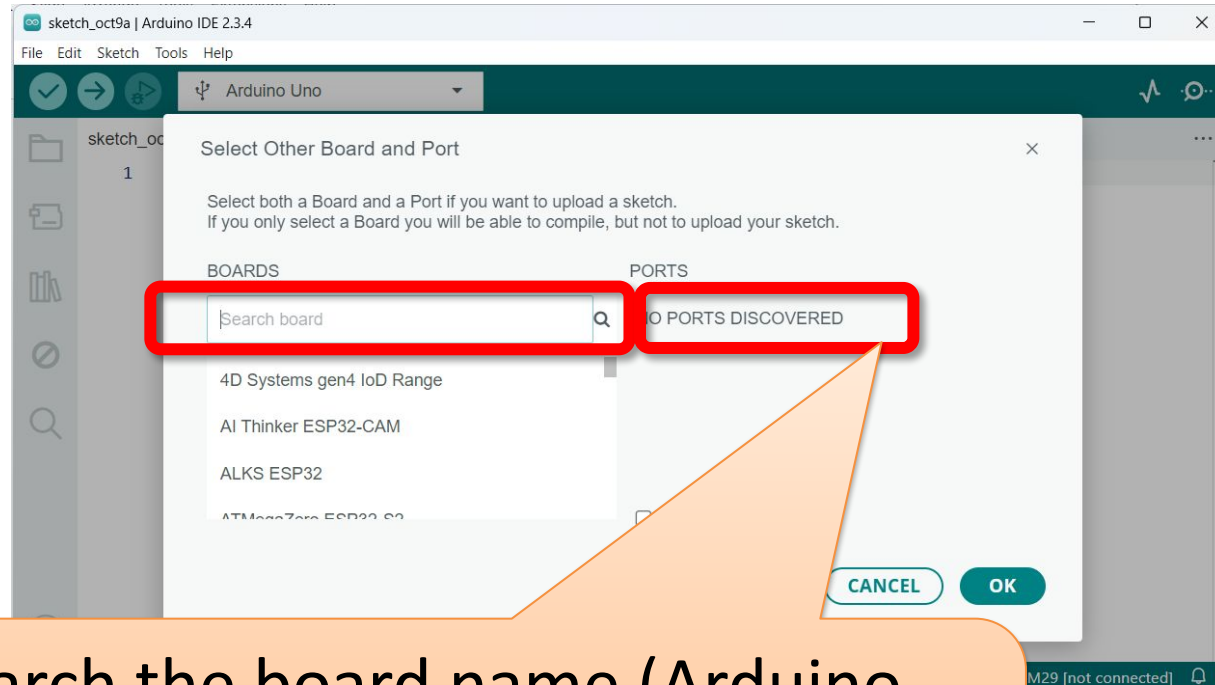
```
void setup()
{
    // put your setup code here, to run once:
}

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

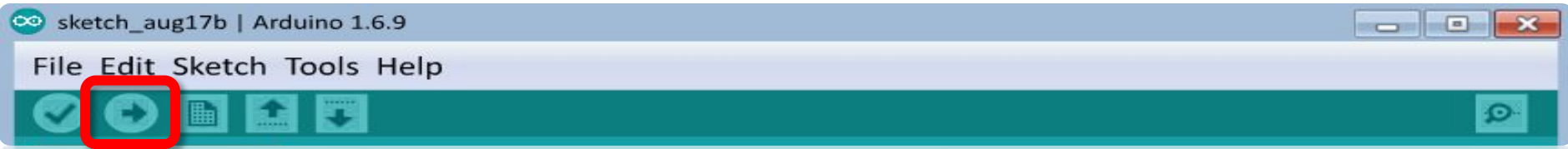


compile the
program

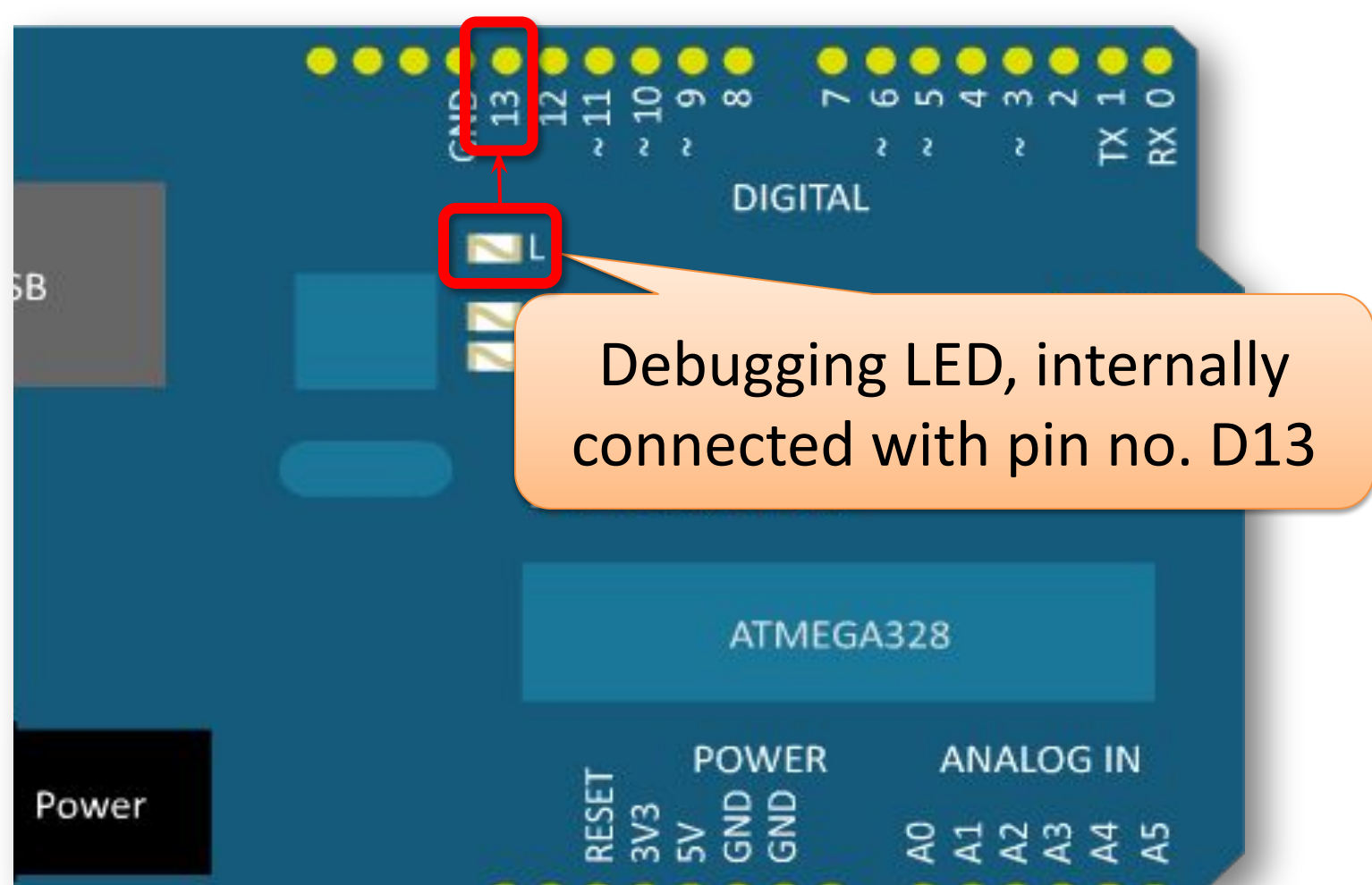




Search the board name (Arduino Uno). It is compulsory to select the Port to which the board is connected



Upload the
program



Sample Code 1

- Write a program to blink the inbuilt LED

```
void setup()
{
    // write comments

    pinMode(13, OUTPUT);

    //This function is used to define the pin number and its function
    //First parameter is pin number
    //2nd parameter is function (INPUT / OUTPUT)
}
void loop()
{
    //This function is used to send digital output
    //First parameter is pin number
    //2nd parameter is actual output(HIGH/LOW)
    digitalWrite(13, HIGH);
    delay(500);
    //This function continu the action for given milliseconds
    digitalWrite(13, HIGH);
    delay(500);
}
```

Thank You

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