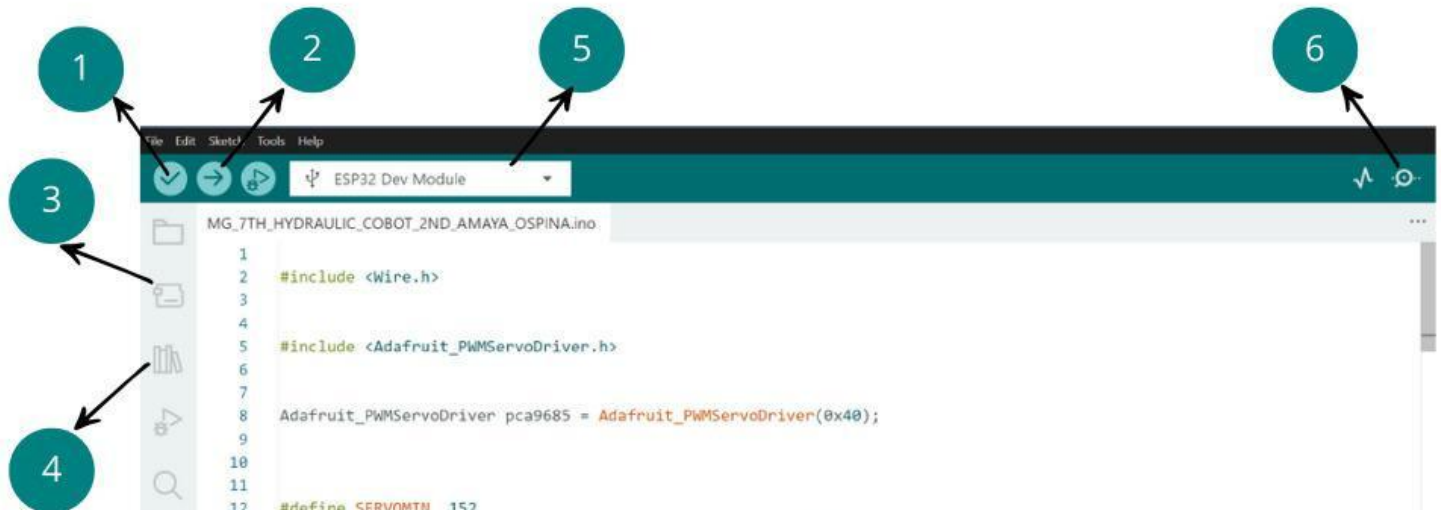




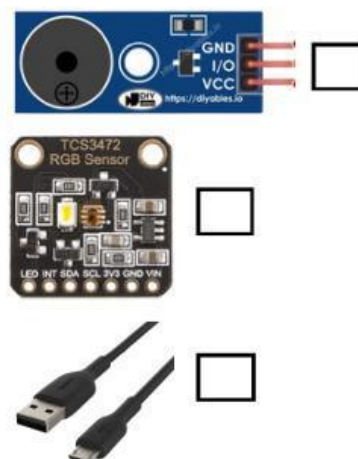
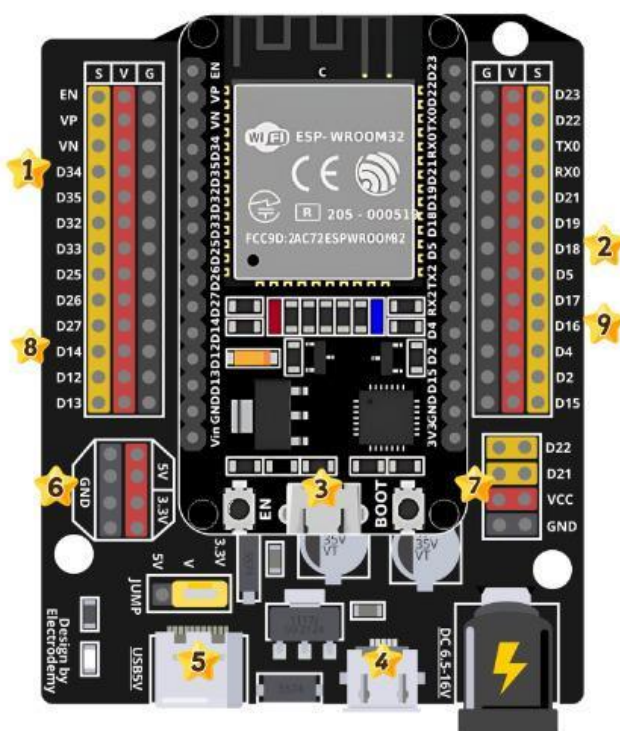
ARDUINO IDE Programming Bases

Indicate the interface parts of the Arduino IDE according to the image.



1 →		4 →	
2 →		5 →	
3 →		6 →	

Put the respect number according to the connection between sensor and actuators with the ESP32. and complete the words in the spaces.



Complete the words in the spaces.

GND

VCC / 3.3V

OUT / S

Read the comments and put on the lines the part of code (use the letters) and the respect function (use the numbers).



HEADER



VOID
SETUP



VOID
LOOP

PART OF
CODE COMMENT

<code>Serial.begin(115200);</code>	☒	☒	1 //Indicate that the buzzer must be in silent
<code>int notes[] = { 524, 588, 660 };</code>	☐	☐	2 // Library to the RGB sensor
<code>noTone(BUZZER);</code>	☐	☐	3 //Indicate the configuration on the sensor
<code>pinMode(BUZZER, OUTPUT);</code>	☐	☐	4 //Start the serial monitor
<code>#define BUZZER 15</code>	☐	☐	5 //define the buzzer like actuator
<code>#include <Adafruit_TCS34725.h></code>	☐	☐	6 //Library to comunicate the I2C Module
<code>uint16_t r, g, b, c;</code>	☐	☐	7 // Start the sensor TCS34725
<code>Adafruit_TCS34725 tcs = Adafruit_TCS34725</code>	☐	☐	8 // Show the values of BLUE
<code>tcs.begin();</code>	☐	☐	9 //unsigned number that use sixteen bits
<code>#include <Wire.h></code>	☐	☐	10 //Indicate the pin of the buzzer
<code>Serial.print(" B: "); Serial.println(b);</code>	☐	☐	11 //Array with natural numbers

Complete the next structures control

SERIAL MONITOR VALUES

```
R: 160 G: 144 B: 116
R: 159 G: 143 B: 115
R: 160 G: 144 B: 116
R: 175 G: 164 B: 136
```

COLOR DETECTION



Silver

```
if (b  116 && r) {
  Serial.println(";Silver has been detected!");
}
```

```
int melody[] = {
  NOTE_FS4, NOTE_FS4, NOTE_A4,
  NOTE_FS4, NOTE_A4, NOTE_FS4, NOTE_GS4,
  NOTE_GS4, NOTE_GS4, NOTE_A4, NOTE_B4}
```

```
for (int note = 0; note   ; ) {
  tone(BUZZER_PIN, [note], 2000);
  delay (2000);
}
```