

Task 1: Algorithm ESP32

Step 1: open "Arduino IDE"

Step 2: Plug the piece into the port via a USB cord >> Tools >> port >> Make sure that the port specified in the "Arduino IDE" is the same as the one in which the device is connected to the laptop or your PC

Step 3: File >> preferences >> Additional boards manager URLs: " https://dl.espressos.com/dl/package_esp32_index.json"

Step 4: Tools >> Board >> Board manager >> ESP 32 >> install

Step 5: Tools >> Board >> ESP32 Arduino >> WEMOS D1 MINI ESP32

Step 6 : file >> examples >> Basics >> blink , This step works to ensure the correct operation of the piece by programming the existing LED in the piece with changing the time in "delay" to ensure that it works

Code:



```
sketch_jul18a | 1.8.19 أردوينو
مساعدة ادوات الشيفرة البرمجية تحرير ملف

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sketch_jul18a

void setup()
{
  pinMode (LED_BUILTIN, OUTPUT);
}
void loop()
{
  digitalWrite(LED_BUILTIN, HIGH);
  delay(2000);
  digitalWrite(LED_BUILTIN, LOW);
  delay(1000);
}
```

○ Step1: Write the code in JavaScript

○ Step2: Code html



Step3: Code CSS

HTML

CSS

JS

Result



```
*,*::after,*::before{
  -webkit-box-sizing: border-box;
  -moz-box-sizing: border-box;
  -ms-box-sizing: border-box;
  box-sizing: border-box;
}

body{
  font-family: arial;
  font-size: 18px;
  margin: 0;
  background:linear-gradient(to right bottom, #ddbb88
, #FFDDBB);
  display: flex;
  align-content: center;
  min-height: 100vh;
  color: #F4587f;
}

.voice_to_text{
  width: 600px;
  text-align: center;
}

#convert_text{
  width: 100%;
  height: 200px;
  border-radius: 10px;
  resize: none;
  padding: 10px;
  font-size: 20px;
```


Step4: Code JS

```
HTML CSS JS Result
click_to_convert.addEventListener('click',function(){
var speech = true;
window.SpeechRecognition = window.webkitSpeechRecognition;
const recognition = new SpeechRecognition();
recognition.interimResults = true;
recognition.lang = 'ar';
recognition.addEventListener('result', e=>{
const transcript = Array.from(e.results)
.map(result =>result[0])
.map(result => result.transcript);
convert_text.innerHTML=transcript;
});
if(speech == true){
recognition.start();
}
});
```

Step5: The results



Link web:

https://cdpn.io/pen/debug/mdxW0dX?authentication_hash=mVMbGBWDqqXr