

مہنگوتہ ك نككنجى سنپ

دہرس - 7

دوكتور مہمہ تجان ياسن

MENGUTECH

(سېھەرلىك ئۆرنەكلەر)

Magical Design

- **Arduino Project Hub**
- <https://projecthub.arduino.cc/trending>
- **Tinkercad Learning Center** (ئۆگەنىش مەركىزى)
- <https://www.tinkercad.com/learn>

مەسلە ھەل قىلىشنىڭ يوللىرى

- سىم يولىنى تەكشۈرۈڭ
- Pin نومۇرىنى تەكشۈرۈڭ
- توك مەنبەسىنى تەكشۈرۈڭ
- قارشىلىق قىممىتىنى تەكشۈرۈڭ
- زىننەت چىرىقىنىڭ يۆلىنىشىنى تەكشۈرۈڭ

Tips for debugging

- Check wiring
- Check Pin numbers
- Check Power supply
- Check Resister values
- Check LED direction

Program Structure

Program Structure

```
//Globle variable
...

void setup()
{
  //Initialization
}

void loop()
{
  //Main Program
}
```

Example 2

You need to use the following:

Which Pin (0, 1, 3, ...) are you using?

`pinMode (pin, mode);`

A Digital Pin can either be an INPUT or an OUTPUT. Since we shall use it to turn-on a LED, we set it to OUTPUT.

`digitalWrite (pin, value);`

Turn-on LED Turn-off LED

A Digital Pin can have 2 values, either HIGH or LOW

`delay (ms);`

The delay() function makes a small pause in milliseconds (ms), e.g., delay(1000) pause the program for 1 second

Arduino Language Reference: <https://www.arduino.cc/en/Reference>