

LEMBAR KERJA PESERTA DIDIK
PROCEDURE TEXT

NAMA:

KELOMPOK:

KELAS:

Worksheet 1:

Fill in the blank by dragging the correct answer into the black space!

HOW TO UPLOAD AN ARDUINO SKETCH

Materials:

1. PC/Laptop with connection on
2. Arduino Board (Uno, Nano, Mega, etc.)
3. LED
4. Resistor
5. Breadboard
6. Jumper Wires

Steps:

1. [.....] the Arduino board to your computer through USB.
2. Select the target [.....].
3. [.....] the serial port the board is connected to.
4. Press the "Upload" button to [.....] the sketch to the Arduino.
5. [.....], your LED should now be flashing OFF and ON every second.
6. You have just installed Arduino IDE and used it to successfully write and upload your first Arduino [.....].

Answers:

connect

upload

select

board

finally

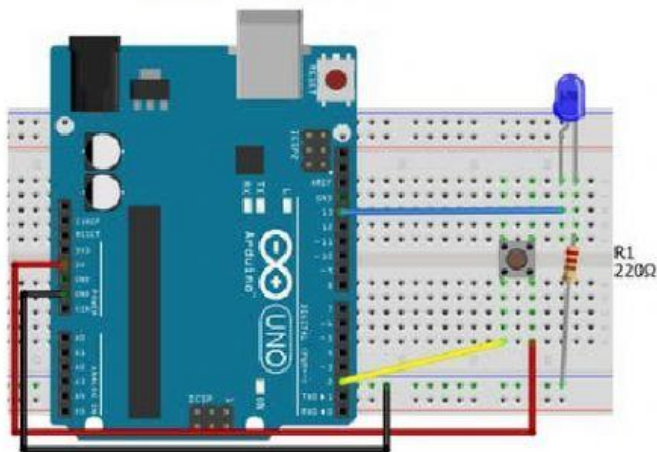
sketch

Worksheet 2:

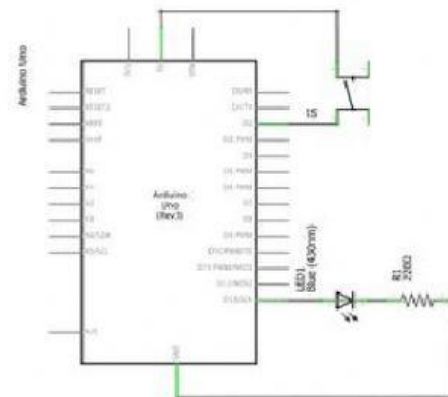
Re-arrange these steps into the right steps! Below are the steps of how to interface the button with Arduino using the Arduino DigitalRead function.

In the Arduino Button tutorial, you are going to learn about interfacing the button with Arduino using the Arduino digitalRead function. The buttons are very easy to use with Arduino but you have to take care of few things like using the pull up resistor or using the pulldown resistor. Without these things, the button will behave erratically.

Breadboard View



Schematic View



The components you will be required for Arduino button tutorial are as follows

- Arduino Uno
- Push Button
- Led
- 10k resistor
- 220-ohm resistor
- Jumper wires
- Breadboard

STEPS:

A. Now you will see that the LED will behave erratically because when the button will not be pressed, pin 2 will not be connected to anything and it will become floating pin. Therefore, we will get a series of unstable '1's and '0's.

1

B. First, just connect the 5V from Arduino to the one side of the button,

2

C. Finally, to overcome this problem, we will have to use a pull down or pull up resistor which will help us in getting a LOW when the button will not be pressed. We can also use an internal pull up resistor which is explained at the end of the post.

3

D. Then, for the third step, connect the pin 13 of Arduino to the positive side of LED,

4

E. Secondly, connect the other side of the button to the Pin 2 of Arduino,

5

F. And connect the other side of LED to the GND through the 220-ohm resistor.

6

Worksheet 3:

PROCEDURE TEXT

HOW TO CONNECT WIFI TO LAPTOP

Materials/equipments:

1.
2.
3.
4.
5.
6.

Steps:

1.
2.
3.
4.
5.
6.
7.
8.