Assignment 2 Digital and Analog Input & Output

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Format: Name the document in the combination of name、ID and No. of Assignment.

**Example: Ping Yi\_30802023\_Assignment2.doc**

**Email the document to “pingy@wxit.edu.cn” before Oct 1st.**

**Font’s requirement:**

**Chinese Letter “宋体五号”**

**English and digit Letter “Time New Roman 五号”**

**Task 1** Specify and mark **Arduino Uno onboard Digital and Analog Pins.**

任务1 描述和标注Arduino Uno板上的数字引脚和模拟引脚。

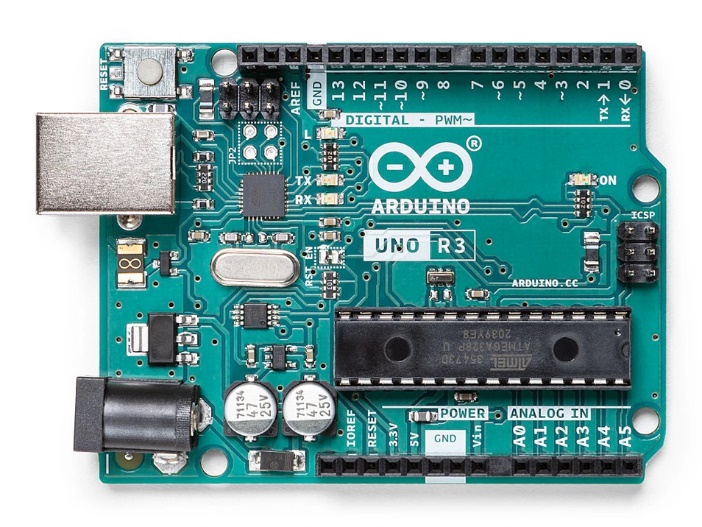


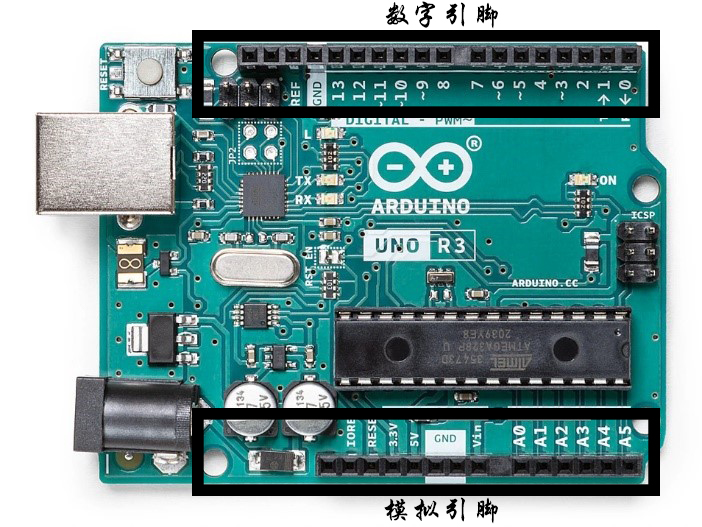
Fig 2 Arduino Uno Board

**Task 2 One** LED is linked with the **digital pin**, set up a circuit to use **a button (or two)** to control the on and off state of the LED. Draw the circuit in TinkerCAD, make the executable codes for the function.

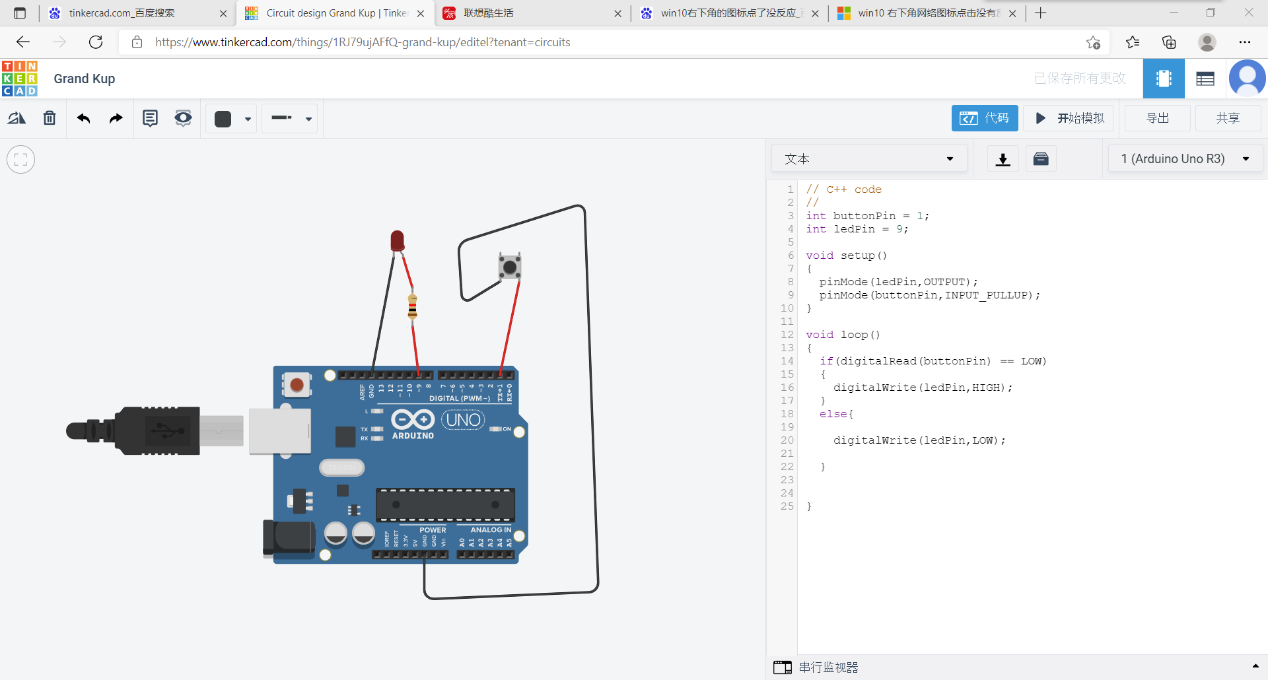
任务2 一个LED与数字引脚相连，设置一个电路，用一个（或两个）按钮来控制LED的开启和关闭状态。在TinkerCAD中绘制电路，编写功能的可执行代码。

Fig 2 Circuit

Task1



Task2



|  |
| --- |
| 1. // C++ code 2. // 3. int buttonPin **=** 1**;** 4. int ledPin **=** 9**;** 5. void setup**()** 6. **{** 7. pinMode**(**ledPin**,**OUTPUT**);** 8. pinMode**(**buttonPin**,**INPUT\_PULLUP**);** 9. **}** 10. void loop**()** 11. **{** 12. **if(**digitalRead**(**buttonPin**)** **==** LOW**)** 13. **{**     1. digitalWrite**(**ledPin**,**HIGH**);** 14. **}** 15. **else{**     1. digitalWrite**(**ledPin**,**LOW**);** 16. **}** 17. **}** |