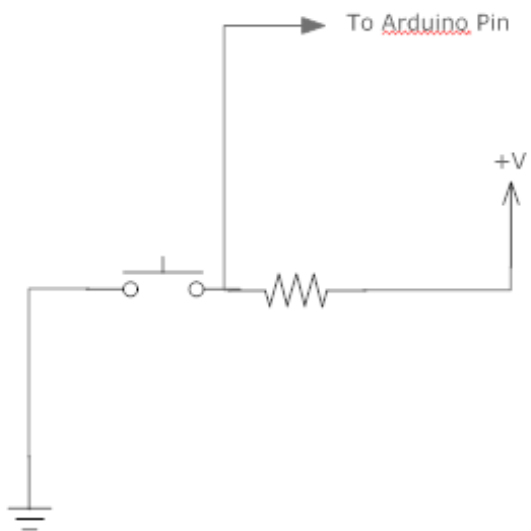
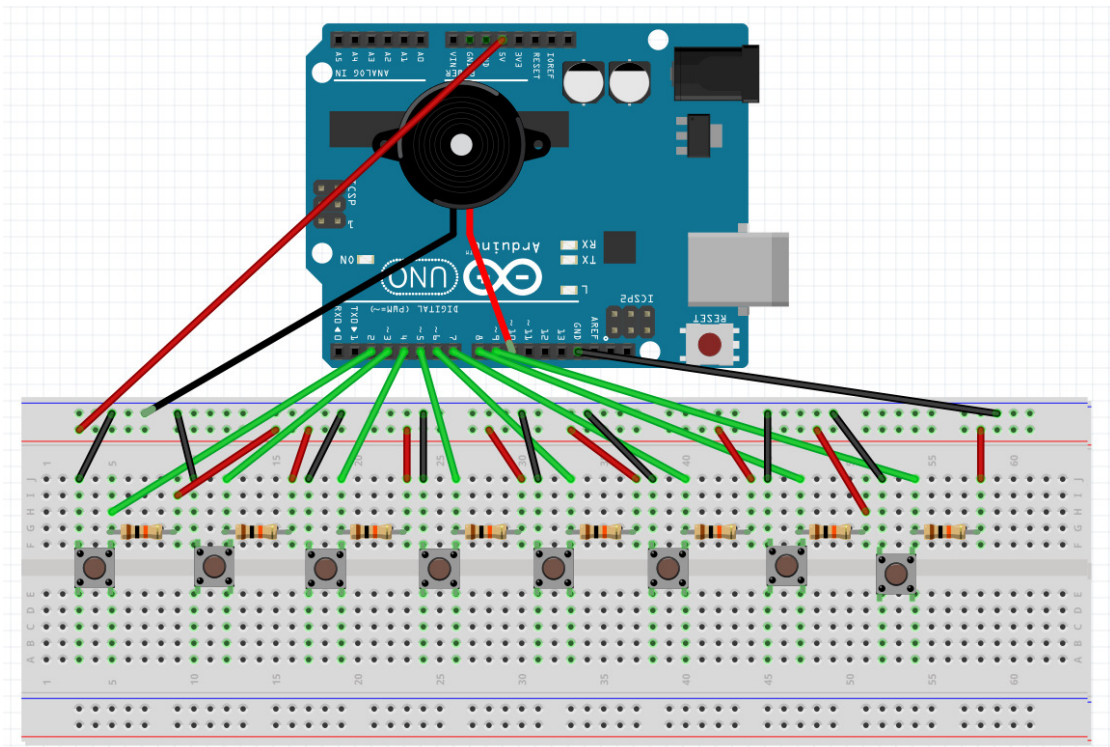


Making an Arduino Piano

The Wiring



The pushbutton switches are hooked up with one side of the switch connected to ground and the other side of the switch connected to a 10 KΩ resistor. Arduino pins (2 through 9) are hooked up to their respective pushbuttons.

Pushbutton Switch Hookup

The Code

```
void setup(){
  pinMode(10,OUTPUT); //Set speaker as an OUTPUT
  pinMode(2,INPUT_PULLUP); //Button 2 as an INPUT_PULLUP
  pinMode(3,INPUT_PULLUP); //Button 3 as an INPUT_PULLUP
  pinMode(4,INPUT_PULLUP); //Button 4 as an INPUT_PULLUP
  pinMode(5,INPUT_PULLUP); //Button 5 as an INPUT_PULLUP
  pinMode(6,INPUT_PULLUP); //Button 6 as an INPUT_PULLUP
  pinMode(7,INPUT_PULLUP); //Button 7 as an INPUT_PULLUP
  pinMode(8,INPUT_PULLUP); //Button 8 as an INPUT_PULLUP
  pinMode(9,INPUT_PULLUP); //Button 9 as an INPUT_PULLUP
}

void loop(){
  if(digitalRead(2)==LOW){ //if button 2 is sending a low signal...
    tone(10,523); //...play a tone of 523 hertz on the speaker (C5)
  }
  else if(digitalRead(3)==LOW){ //if button 3 is sending a low signal...
    tone(10,587); //...play a tone of 587 hertz on the speaker (D5)
  }
  else if(digitalRead(4)==LOW){ //if button 4 is sending a low signal...
    tone(10,659); //...play a tone of 659 hertz on the speaker (E5)
  }
  else if(digitalRead(5)==LOW){ //if button 5 is sending a low signal...
    tone(10,698); //...play a tone of 698 hertz on the speaker (F5)
  }

  else if(digitalRead(6)==LOW){ //if button 6 is sending a low signal...
    tone(10,783); //...play a tone of 783 hertz on the speaker (G5)
  }
  else if(digitalRead(7)==LOW){ //if button 7 is sending a low signal...
    tone(10,880); //...play a tone of 880 hertz on the speaker (A5)
  }
  else if(digitalRead(8)==LOW){ //if button 8 is sending a low signal...
    tone(10,987); //...play a tone of 987 hertz on the speaker (B5)
  }
  else if(digitalRead(9)==LOW){ //if button 9 is sending a low signal...
    tone(10,1046); //...play a tone of 1046 hertz on the speaker (C6)
  }
  else{ //in all other cases (buttons not sending a low signal)...
    noTone(10); //send a noTone command to the speaker
  }
}
```