```
//remember, this is a comment
//this code will turn a LED on when a button is pushed

//let's create some variables
//variables contain information, for example:
int led = 3;//the name of the variable is "led", and it stores the number 3
//the "int" before "led" means that we are going to store a number(this type of number is an int
//now let's make a variable that will store the pin number of the button
int button = 8;


//the setup function
//setup() runs once at the beginning of the program, when the Arduino is powered On.
void setup(){
  pinMode(led, OUTPUT);//set the pin called led as an OUTPUT...since led contains 3, this will s
  pinMode(button, INPUT);//set the pin called button as an INPUT because we want to receive a si
  //...since button contains 8, this will set pin 8
}//end setup()

//the loop function
//loop() runs right after setup()
//loop() never stops running as long as the Arduino is powered On.
void loop(){
  //now we have to "sense" if our button is ever pressed:
  //create a variable that contains the "state" of our button
  int state = digitalRead(button);
  //now we have to make a decision:
  //if our button is pressed, then we turn the LED on
  //if our button is not pressed, then the LED will turn off
  if(state == HIGH){//two equal signs means that we are testing if the things on either side are
//one equal sign is for assignment, like creating a variable and setting it something like a num
    //if the button is pressed, then do is:
    digitalWrite(led, HIGH);//use led(pin 3), send it a command to turn HIGH, HIGH means on
  }else{//if the button is not pressed do this:
    digitalWrite(led, LOW);//use led(pin 3), send it a command to turn LOW, LOW means off
  }
}//end loop()
```