**Arduino code for LED light**

// C++ code

//

/\*

This program blinks pin 13 of the Arduino (the

built-in LED)

\*/

int A = 0;

int RED = 13;

int GREEN = 12;

void setup()

{

pinMode(LED\_BUILTIN, OUTPUT);

}

void loop()

{

// turn the LED on (HIGH is the voltage level)

if (A==1) {

digitalWrite(GREEN, HIGH);

delay(100); // Wait for 100000 millisecond(s)

} else {

digitalWrite(RED, HIGH);

delay(100);

}}

// Wait for 100000 millisecond(s)

**NRFL transmitter code**

/\*

\* Arduino Wireless Communication Tutorial

\* Example 1 - Transmitter Code

\*

\* by Dejan Nedelkovski, www.HowToMechatronics.com

\*

\* Library: TMRh20/RF24, https://github.com/tmrh20/RF24/

\*/

#include <SPI.h>

#include <nRF24L01.h>

#include <RF24.h>

RF24 radio(7, 8); // CE, CSN

const byte address[6] = "00001";

void setup() {

radio.begin();

radio.openWritingPipe(address);

radio.setPALevel(RF24\_PA\_MIN);

radio.stopListening();

}

void loop() {

const char text[] = "Hello World";

radio.write(&text, sizeof(text));

delay(1000);

}

**NRFL receiver code**

/\*

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\* Example 1 - Receiver Code

\*

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\*

\* Library: TMRh20/RF24, https://github.com/tmrh20/RF24/

\*/

#include <SPI.h>

#include <nRF24L01.h>

#include <RF24.h>

RF24 radio(7, 8); // CE, CSN

const byte address[6] = "00001";

void setup() {

Serial.begin(9600);

radio.begin();

radio.openReadingPipe(0, address);

radio.setPALevel(RF24\_PA\_MIN);

radio.startListening();

}

void loop() {

if (radio.available()) {

char text[32] = "";

radio.read(&text, sizeof(text));

Serial.println(text);

}

}

**RFID code**

#include <SPI.h>

#include <MFRC522.h>

#define RST\_PIN 9 // Configurable, see typical pin layout above

#define SS\_PIN 10 // Configurable, see typical pin layout above

MFRC522 mfrc522(SS\_PIN, RST\_PIN); // Create MFRC522 instance

void setup() {

Serial.begin(115200); // Initialize serial communications with the PC

while (!Serial); // Do nothing if no serial port is opened (added for Arduinos based on ATMEGA32U4)

SPI.begin(); // Init SPI bus

mfrc522.PCD\_Init(); // Init MFRC522

delay(4); // Optional delay. Some board do need more time after init to be ready, see Readme

mfrc522.PCD\_DumpVersionToSerial(); // Show details of PCD - MFRC522 Card Reader details

Serial.println(F("Scan PICC to see UID, SAK, type, and data blocks..."));

}

void loop() {

// Reset the loop if no new card present on the sensor/reader. This saves the entire process when idle.

if ( ! mfrc522.PICC\_IsNewCardPresent()) {

return;

}

// Select one of the cards

if ( ! mfrc522.PICC\_ReadCardSerial()) {

return;

}

// Dump debug info about the card; PICC\_HaltA() is automatically called

mfrc522.PICC\_DumpToSerial(&(mfrc522.uid));

}