// Pat McMahon 8/9/2018, modified with up & Down on 4/10/2022, modified 17/10/2022 for mini remote also.

 //Up & Down Button on IR Remote Counts up & down Automatically at 1 Second intervals

//Centre Button turns all off.

//Buttons 0 to 9 display numbers 0 to 9 when pressed.

#include <IRremote.h>

int RECV\_PIN = A4;

IRrecv irrecv(RECV\_PIN);

int APin = 5;    // A pin of the LED to pin 5

int BPin = 6;    // B pin of the LED to pin 6

int CPin = 7;    // C pin of the LED to pin 7

int DPin = 8;    // D pin of the LED to pin 8

int EPin = 9;    // E pin of the LED to pin 9

int FPin = 10;   // F pin of the LED to pin 10

int GPin = 11;   // G pin of the LED to pin 11

int delayTime=1000;

void setup()

{

  pinMode(APin, OUTPUT);

  pinMode(BPin, OUTPUT);

  pinMode(CPin, OUTPUT);

  pinMode(DPin, OUTPUT);

  pinMode(EPin, OUTPUT);

  pinMode(FPin, OUTPUT);

  pinMode(GPin, OUTPUT);

  Serial.begin(9600);

  irrecv.enableIRIn(); // Start the receiver

 }

void loop()

{

  // turns on each of the Numbers of the

// 7 Segment Display in order.

  decode\_results results;

if (irrecv.decode(&results)) {

    Serial.println(results.value, HEX);

    int DelayTime=1000;

 switch(results.value)

{

  case 0x910:

  case 0xff9867:

        // Button 0

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, LOW);

       break;

   case 0x010:

   case 0xffa25d:

        // Button 1

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

       break;

      case 0x810:

      case 0xff629d:

        // Button 2

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

      break;

      case 0x410:

       case 0xffe21d:

        // Button 3

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

      break;

      case 0xC10:

       case 0xff22dd:

        // Button 4

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

      break;

      case 0x210:

       case 0xff02fd:

        // Button 5

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

      break;

  case 0xA10:

   case 0xffc23d:

        // Button 6

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

        break;

      case 0x610:

       case 0xffe01f:

        // Button 7

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

        break;

      case 0xE10:

       case 0xffa857:

        // Button 8

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

        break;

        case 0x110:

         case 0xff906f:

        // Button 9

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

        break;

        case 0xA70:

         case 0xff38c7:

        // Centre Button OFF

        digitalWrite(APin, LOW);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

        break;

         case 0x2F0:

          case 0xff18e7:

        // Number Up Button

        //  0 key

          Serial.println("Key 0");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

        // 1 key

        Serial.println("Key 1");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

        delay(DelayTime);

        // 2 key

        Serial.println("Key 2");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  3 key

        Serial.println("Key 3");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  4 key

         Serial.println("Key 4");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  5 key

         Serial.println("Key 5");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  6 key

          Serial.println("Key 6");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //    7 key

          Serial.println("Key 7");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

        //  8 key

          Serial.println("Key 8");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  9 key

          Serial.println("Key 9");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        break;

         case 0xAF0:

          case 0xff4ab5:

        // Number Down Button

         //  9 key

          Serial.println("Key 9");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  8 key

          Serial.println("Key 8");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //    7 key

          Serial.println("Key 7");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

         //  6 key

          Serial.println("Key 6");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //  5 key

         Serial.println("Key 5");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //  4 key

         Serial.println("Key 4");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //  3 key

        Serial.println("Key 3");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         // 2 key

        Serial.println("Key 2");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

          // 1 key

        Serial.println("Key 1");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

        delay(DelayTime);

         //  0 key

          Serial.println("Key 0");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

}

        irrecv.resume(); // Receive the next value

  }

 delay(100);

}