#include <SoftwareSerial.h>

boolean objectDetect = false;

int const LED\_PIN = 53; // On board LED

int const SENSOR\_PIN = 8; // Pin to attach to sensor output

void setup() {

// put your setup code here, to run once:

pinMode(13,OUTPUT);

pinMode(3,INPUT);

pinMode(12,OUTPUT);

pinMode(4,INPUT);

pinMode(50,OUTPUT);

pinMode(5,INPUT);

pinMode(51,OUTPUT);

pinMode(6,INPUT);

pinMode(LED\_PIN, OUTPUT);

pinMode (SENSOR\_PIN, INPUT);

Serial.begin(9600);

}

void loop() {

// put your main code here, to run repeatedly:

if (digitalRead(3)== LOW)

{

digitalWrite(13,HIGH);

Serial.print(F("NEXT"));

delay(20);

}

else

{

digitalWrite(13,LOW);

delay(20) ;

}

if (digitalRead(4)== LOW)

{

digitalWrite(12,HIGH);

Serial.print(F("PREV"));

delay(20);

}

else

{

digitalWrite(12,LOW);

delay(20);

}

if (digitalRead(5)== LOW)

{

digitalWrite(50,HIGH);

Serial.print(F("SELECT"));

delay(20);

}

else

{

digitalWrite(50,LOW);

delay(20);

}

if (digitalRead(6)== LOW)

{

digitalWrite(51,HIGH);

Serial.print(F("BACK"));

delay(20);

}

else

{

digitalWrite(51,LOW);

delay(20);

}

if ( digitalRead( SENSOR\_PIN)) // If detector Output is HIGH, there is no object

{

if (objectDetect == true) { // If we had previously detected an object

objectDetect = false; // Set flag to no object detected

digitalWrite (LED\_PIN, LOW); // Turn LED off if no detection

Serial.println("Object Detected");

}

}

else // If the Output is LOW, there is an object detected

{

objectDetect = true; // Set flag

digitalWrite (LED\_PIN, HIGH); // turn on LED to show the detection.

}

delay(20); // wait for a bit then check again.

}