int a=3;

int b=4;

int c=5;

int d=6;

int e=7;

int f=8;

int g=9;

void setup(){

//Configurar salidas de los leds

pinMode (a, OUTPUT);

pinMode (b, OUTPUT);

pinMode (c, OUTPUT);

pinMode (d, OUTPUT);

pinMode (e, OUTPUT);

pinMode (f, OUTPUT);

pinMode (g, OUTPUT);

//Configurar la salida del buzzer

pinMode (11, OUTPUT);

//Configurar el pin de entrada del pulsador

pinMode (2, INPUT);

//Inicializa el generador de números aleatorios

randomSeed(analogRead(0));

//Apaga todos los leds

digitalWrite (a, LOW);

digitalWrite (b, LOW);

digitalWrite (c, LOW);

digitalWrite (d, LOW);

digitalWrite (e, LOW);

digitalWrite (f, LOW);

digitalWrite (g, LOW);

//Buzzer a 0

digitalWrite (11, LOW);

}

void beep () {

digitalWrite (11, HIGH);

delay (20);

digitalWrite (11, LOW);

}

void escribe\_dado (unsigned char num) {

//Escribe numero en el dado

switch (num) {

case 1: //Encender el número 1

digitalWrite (a, LOW);

digitalWrite (b, HIGH);

digitalWrite (c, HIGH);

digitalWrite (d, LOW);

digitalWrite (e, LOW);

digitalWrite (f, LOW);

digitalWrite (g, LOW);

break;

case 2: //Encender el número 2

digitalWrite (a, HIGH);

digitalWrite (b, HIGH);

digitalWrite (c, LOW);

digitalWrite (d, HIGH);

digitalWrite (e, HIGH);

digitalWrite (f, LOW);

digitalWrite (g, HIGH);

break;

case 3: //Encender el número 3

digitalWrite (a, HIGH);

digitalWrite (b, HIGH);

digitalWrite (c, HIGH);

digitalWrite (d, HIGH);

digitalWrite (e, LOW);

digitalWrite (f, LOW);

digitalWrite (g, HIGH);

break;

case 4: //Encender el número 4

digitalWrite (a, LOW);

digitalWrite (b, HIGH);

digitalWrite (c, HIGH);

digitalWrite (d, LOW);

digitalWrite (e, LOW);

digitalWrite (f, HIGH);

digitalWrite (g, HIGH);

break;

case 5: //Encender el número 5

digitalWrite (a, HIGH);

digitalWrite (b, LOW);

digitalWrite (c, HIGH);

digitalWrite (d, HIGH);

digitalWrite (e, LOW);

digitalWrite (f, HIGH);

digitalWrite (g, HIGH);

break;

case 6: //Encender el número 6

digitalWrite (a, HIGH);

digitalWrite (b, LOW);

digitalWrite (c, HIGH);

digitalWrite (d, HIGH);

digitalWrite (e, HIGH);

digitalWrite (f, HIGH);

digitalWrite (g, HIGH);

break;

default:

case 0: //Apagar todos los leds

digitalWrite (a, LOW);

digitalWrite (b, LOW);

digitalWrite (c, LOW);

digitalWrite (d, LOW);

digitalWrite (e, LOW);

digitalWrite (f, LOW);

digitalWrite (g, LOW);

break;

}

}

void loop () {

unsigned int numero;

while (!digitalRead (2)); //Espera a que aprieten pulsador

escribe\_dado (0); //Apaga todos los leds

while (digitalRead (2)); //Espera a que suelten pulsador

beep ();

numero = random(1, 7); //Genera un numero al azar entre 1 y 6

escribe\_dado (numero); //Mostrar el numero en el dado

}