

```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
int ladoA = 0;
int ladoB = 0;
LiquidCrystal_I2C lcd(0x27,16,2);

int b1 = 4;
int b2 = 3;
int b3 = 2;
int e1 = 0;
int e2 = 0;
int e3 = 0;
int leda = 5;
int ledb =6;
int trava = 0;
```

```
#include "SoftwareSerial.h"
#include "DFRobotDFPlayerMini.h"
```

```
void setup () {
  pinMode(b1, INPUT);
  pinMode(b1, INPUT);
  pinMode(b1, INPUT);
  pinMode(leda, OUTPUT);
  pinMode(ledb, OUTPUT);
  pinMode(8,INPUT);
  pinMode(9,INPUT);
  pinMode(10,INPUT);
  Serial.begin(9600);
```

```
  lcd.init();
  lcd.backlight();
  lcd.print("Ta funfando");
  delay(1500);
  lcd.clear();
```

```
  // Inicializa a serial do Arduino
  Serial.begin(115200);
```

```
}
```

```
void loop ()
```

```

{

{
  e1 = digitalRead (b1);
  e2 = digitalRead (b2);
  e3 = digitalRead (b3);

if((e1 == 1 ) && (trava == 0) ){
  digitalWrite (leda, 1);
  trava = 1;
  delay(3000);
  digitalWrite (leda, 0);
}
if((e2 == 1) && (trava == 0)){
  digitalWrite (ledb, 1);
  trava = 1;
  delay(3000);
  digitalWrite (ledb, 0);
}
  trava = 0;
}

{
  Serial.println(ladoA);
  lcd.home();
  lcd.setCursor(1,0);
  lcd.print("Time Fab:");
  lcd.setCursor(1,1);
  lcd.print("Time Lab:");
  lcd.setCursor(11,0);
  lcd.print(ladoA);
  lcd.setCursor(11,1);
  lcd.print(ladoB);

  if(digitalRead(8)== HIGH){
    ladoA++;
    lcd.setCursor(11,0);
    lcd.print(ladoA);
    delay(800);}
  if(digitalRead(9)== HIGH){
    ladoB++;
    lcd.setCursor(11,1);
    lcd.print(ladoB);
    delay(800);}
  if(digitalRead(10)== HIGH){
    ladoA = 0;
    ladoB = 0;
  }
}

```

```
delay(800);  
}
```

```
}  
}
```