

## Arduino Programmcode

```
#include <SPI.h>
#include <math.h>

float Dichtung_OSaft = 1.0; // 1,0 = hält weit über eine Minute am Schlauchende
float Dichtung_ASaft = 0.9; // 0,9 = hält über eine Minute am Schlauchende
ACHTUNG != 1 --> Swimming pool anpassen
float Dichtung_ZSaft = 0.5; // 0,5 = kurz über Flaschenhals nach 35 sek
float Dichtung_Vodka = 0.7; // 1,0 = Flasche nach 20 sek ACHTUNG != 1 -->
Swimming pool anpassen 0,7 = hält sich über eine Minute
float Dichtung_Barcadi = 1.3; // 1,0 = hält über eine Minute am Schlauchende
1,5 = fließt sofort zurück
float Dichtung_Tequila = 0.6; // 0,7 = mitte nach 30 sek
float Dichtung_Whisky = 0.85; // 1,0 hält sich über eine Minute 1.5 = Flasche
nach 10 sek 0,85 = neue Silikonabdichtung
float Dichtung_Triple_Sec = 0.5; // 0,8 = mitte nach 30 sek 0,4 = hält über
eine Minute am Schlauchende
float Dichtung_Gin = 1.0; // 1,0 = hält weit über eine Minute am Schlauchende
1,45 = Flasche nach 7 sek
float Dichtung_Zucker_Sirup = 1.0;
float Dichtung_Blue_Curacao = 1.5; // Flasche nach 2 sek // ACHTUNG != 1 -->
Swimming pool anpassen
float Dichtung_Pfirsich_Likoer = 1.0; // 1,0 = Flasche nach 10 sek

int LED = 19;

int Cocktail_Bestellung_1 = 14; //Sex on the Beach
int Cocktail_Bestellung_2 = 16; //Pina Colada
int Cocktail_Bestellung_3 = 18; //Tequila Sunrise
int Cocktail_Bestellung_4 = 7; //Margarita
int Cocktail_Bestellung_5 = 6; //Swimming Pool
int Cocktail_Bestellung_6 = 8; //Whiskey Sour
int Cocktail_Bestellung_7 = 5; // Long Island Ice Tea
int Afrei_Cocktail_Bestellung_1 = 9; //Sex on the Beach AFREI
int Afrei_Cocktail_Bestellung_2 = 15; //Pina Colada AFREI
int Afrei_Cocktail_Bestellung_3 = 17; //Tequila Sunrise AFREI

int Pfirsich_Likoer = 40;
int Blue_Curacao = 41;
int Zucker_Sirup = 42;
int Gin = 43;
int Triple_Sec = 44;
int Whiskey = 45;
int Tequila = 46;
int Barcadi = 47;
int Vodka = 48;
int Zitronensaft = 49;
int Ananassaft = 50;
int Orangensaft = 21;

int Pfirsich_Likoer_State = 0;
int Blue_Curacao_State = 0;
int Zucker_Sirup_State = 0;
int Gin_State = 0;
int Triple_Sec_State = 0;
int Whiskey_State = 0;
int Tequila_State = 0;
int Barcadi_State = 0;
int Vodka_State = 0;
int Zitronensaft_State = 0;
int Ananassaft_State = 0;
int Orangensaft_State = 0;

int Taster_Sex_on_the_Beach = 0;
int Taster_Pina_Colada = 0;
int Taster_Tequila_Sunrise = 0;
int Taster_Margarita = 0;
int Taster_Swimming_Pool = 0;
```

## Arduino Programmcode

```
int Taster_Whisky_Sour = 0;
int Taster_Long_Island_Ice_Tea = 0;
int Taster_Sex_on_the_Beach_Afrei = 0;
int Taster_Pina_Colada_Afrei = 0;
int Taster_Tequila_Sunrise_Afrei = 0;

int Pumpe_Pfirsich_Likoer = 22;
int Pumpe_Blue_Curacao = 23;
int Pumpe_Zucker_Sirup = 24;
int Pumpe_Gin = 25;
int Pumpe_Triple_Sec = 26;
int Pumpe_Whiskey = 27;
int Pumpe_Tequila = 28;
int Pumpe_Barcadi = 29;
int Pumpe_Vodka = 30;
int Pumpe_Zitronensaft = 31;
int Pumpe_Ananassaft = 32;
int Pumpe_Orangensaft = 33;

// Programm Start
void setup() {

  Serial.begin(9600);

  pinMode(LED, OUTPUT);
  pinMode(Pumpe_Pfirsich_Likoer, OUTPUT);
  pinMode(Pumpe_Blue_Curacao, OUTPUT);
  pinMode(Pumpe_Zucker_Sirup, OUTPUT);
  pinMode(Pumpe_Gin, OUTPUT);
  pinMode(Pumpe_Triple_Sec, OUTPUT);
  pinMode(Pumpe_Whiskey, OUTPUT);
  pinMode(Pumpe_Tequila, OUTPUT);
  pinMode(Pumpe_Barcadi, OUTPUT);
  pinMode(Pumpe_Vodka, OUTPUT);
  pinMode(Pumpe_Zitronensaft, OUTPUT);
  pinMode(Pumpe_Ananassaft, OUTPUT);
  pinMode(Pumpe_Orangensaft, OUTPUT);

  pinMode(Pfirsich_Likoer, INPUT);
  pinMode(Blue_Curacao, INPUT);
  pinMode(Zucker_Sirup, INPUT);
  pinMode(Gin, INPUT);
  pinMode(Triple_Sec, INPUT);
  pinMode(Whiskey, INPUT);
  pinMode(Tequila, INPUT);
  pinMode(Barcadi, INPUT);
  pinMode(Vodka, INPUT);
  pinMode(Zitronensaft, INPUT);
  pinMode(Ananassaft, INPUT);
  pinMode(Orangensaft, INPUT);

  pinMode(Cocktail_Bestellung_1, INPUT);
  pinMode(Cocktail_Bestellung_2, INPUT);
  pinMode(Cocktail_Bestellung_3, INPUT);
  pinMode(Cocktail_Bestellung_4, INPUT);
  pinMode(Cocktail_Bestellung_5, INPUT);
  pinMode(Cocktail_Bestellung_6, INPUT);
  pinMode(Cocktail_Bestellung_7, INPUT);
  pinMode(Afrei_Cocktail_Bestellung_1, INPUT);
  pinMode(Afrei_Cocktail_Bestellung_2, INPUT);
  pinMode(Afrei_Cocktail_Bestellung_3, INPUT);

  //Relais null setzen LED ausschalten
  digitalWrite(LED, HIGH);
  digitalWrite(Pumpe_Zucker_Sirup, HIGH);
  digitalWrite(Pumpe_Gin, HIGH);
```

### Arduino Programmcode

```
digitalWrite(Pumpe_Pfirsich_Likoer, HIGH);
digitalWrite(Pumpe_Blue_Curacao, HIGH);
digitalWrite(Pumpe_Tequila, HIGH);
digitalWrite(Pumpe_Barcadi, HIGH);
digitalWrite(Pumpe_Triple_Sec, HIGH);
digitalWrite(Pumpe_Whiskey, HIGH);
digitalWrite(Pumpe_Ananassaft, HIGH);
digitalWrite(Pumpe_Orangensaft, HIGH);
digitalWrite(Pumpe_Vodka, HIGH);
digitalWrite(Pumpe_Zitronensaft, HIGH);
```

```
void loop() {
```

```
Taster_Sex_on_the_Beach = digitalRead(Cocktail_Bestellung_1);
Taster_Pina_Colada = digitalRead(Cocktail_Bestellung_2);
Taster_Tequila_Sunrise = digitalRead(Cocktail_Bestellung_3);
Taster_Margarita = digitalRead(Cocktail_Bestellung_4);
Taster_Swimming_Pool = digitalRead(Cocktail_Bestellung_5);
Taster_Whisky_Sour = digitalRead(Cocktail_Bestellung_6);
Taster_Long_Island_Ice_Tea = digitalRead(Cocktail_Bestellung_7);
Taster_Sex_on_the_Beach_Afrei = digitalRead(Afrei_Cocktail_Bestellung_1);
Taster_Pina_Colada_Afrei = digitalRead(Afrei_Cocktail_Bestellung_2);
Taster_Tequila_Sunrise_Afrei = digitalRead(Afrei_Cocktail_Bestellung_3);
Pfirsich_Likoer_State = digitalRead(Pfirsich_Likoer);
Blue_Curacao_State = digitalRead(Blue_Curacao);
Zucker_Sirup_State = digitalRead(Zucker_Sirup);
Gin_State = digitalRead(Gin);
Triple_Sec_State = digitalRead(Triple_Sec);
Whiskey_State = digitalRead(Whiskey);
Tequila_State = digitalRead(Tequila);
Barcadi_State = digitalRead(Barcadi);
Vodka_State = digitalRead(Vodka);
Zitronensaft_State = digitalRead(Zitronensaft);
Ananassaft_State = digitalRead(Ananassaft);
Orangensaft_State = digitalRead(Orangensaft);
```

```
//Cocktail Ansteuerung
if (Taster_Sex_on_the_Beach == HIGH)
{
  Sex_on_the_Beach();
}
```

```
if (Taster_Pina_Colada == HIGH)
{
  Pina_Colada();
}
```

```
if (Taster_Tequila_Sunrise == HIGH)
{
  Tequila_Sunrise();
}
```

```
if (Taster_Margarita == HIGH)
{
  Margarita();
}
```

```
if (Taster_Swimming_Pool == HIGH)
{
  Swimming_Pool();
}
```

```
if (Taster_Whisky_Sour == HIGH)
{
  Whiskey_Sour();
}
```

## Arduino Programmcode

```
}  
  
if (Taster_Long_Island_Ice_Tea == HIGH)  
{  
  Long_Island_Ice_Tea();  
}  
  
if (Taster_Sex_on_the_Beach_Afrei == HIGH)  
{  
  Sex_on_the_Beach_Afrei();  
}  
  
if (Taster_Pina_Colada_Afrei == HIGH)  
{  
  Pina_Colada_Afrei();  
}  
  
if (Taster_Tequila_Sunrise_Afrei == HIGH)  
{  
  Tequila_Sunrise_Afrei();  
}  
  
// Flaschen Einzelansteuerung  
if (Pfirsich_Likoer_State == HIGH)  
{  
  digitalWrite(Pumpe_Pfirsich_Likoer, LOW);  
  delay(200*Dichtung_Pfirsich_Likoer);  
  digitalWrite(Pumpe_Pfirsich_Likoer, HIGH);  
}  
  
if (Blue_Curacao_State == HIGH)  
{  
  digitalWrite(Pumpe_Blue_Curacao, LOW);  
  delay(200*Dichtung_Blue_Curacao);  
  digitalWrite(Pumpe_Blue_Curacao, HIGH);  
}  
  
if (Zucker_Sirup_State == HIGH)  
{  
  digitalWrite(Pumpe_Zucker_Sirup, LOW);  
  delay(200*Dichtung_Zucker_Sirup);  
  digitalWrite(Pumpe_Zucker_Sirup, HIGH);  
}  
  
if (Gin_State == HIGH)  
{  
  digitalWrite(Pumpe_Gin, LOW);  
  delay(200*Dichtung_Gin);  
  digitalWrite(Pumpe_Gin, HIGH);  
}  
  
if (Triple_Sec_State == HIGH)  
{  
  digitalWrite(Pumpe_Triple_Sec, LOW);  
  delay(200*Dichtung_Triple_Sec);  
  digitalWrite(Pumpe_Triple_Sec, HIGH);  
}  
  
if (Whiskey_State == HIGH)  
{  
  digitalWrite(Pumpe_Whiskey, LOW);  
  delay(200*Dichtung_Whiskey);  
  digitalWrite(Pumpe_Whiskey, HIGH);  
}
```

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```

if (Tequila_State == HIGH)
{
    digitalWrite(Pumpe_Tequila, LOW);
    delay(200*Dichtung_Tequila);
    digitalWrite(Pumpe_Tequila, HIGH);
}

if (Barcadi_State == HIGH)
{
    digitalWrite(Pumpe_Barcadi, LOW);
    delay(200*Dichtung_Barcadi);
    digitalWrite(Pumpe_Barcadi, HIGH);
}

if (Vodka_State == HIGH)
{
    digitalWrite(Pumpe_Vodka, LOW);
    delay(200*Dichtung_Vodka);
    digitalWrite(Pumpe_Vodka, HIGH);
}

if (Zitronensaft_State == HIGH)
{
    digitalWrite(Pumpe_Zitronensaft, LOW);
    delay(200*Dichtung_ZSaft);
    digitalWrite(Pumpe_Zitronensaft, HIGH);
}

if (Ananassaft_State == HIGH)
{
    digitalWrite(Pumpe_Ananassaft, LOW);
    delay(200*Dichtung_ASaft);
    digitalWrite(Pumpe_Ananassaft, HIGH);
}

if (Orangensaft_State == HIGH)
{
    digitalWrite(Pumpe_Orangensaft, LOW);
    delay(200*Dichtung_OSaft);
    digitalWrite(Pumpe_Orangensaft, HIGH);
}
} // loop Ende

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////

// Cocktail Rezepte

void Sex_on_the_Beach() // 21 c l + 3 c l Grenadine = 24 c l
{
    float Menge_Sex_on_the_Beach = 1.2;

    int time_OSaft = 4000*Dichtung_OSaft * Menge_Sex_on_the_Beach; // 8 c l
    int time_ASaft = 2000*Dichtung_ASaft * Menge_Sex_on_the_Beach; // 4 c l
    int time_ZSaft = 2760*Dichtung_ZSaft * Menge_Sex_on_the_Beach; // 2 c l
    int time_Pfirsich_Likoer = 2200*Dichtung_Pfirsich_Likoer *
Menge_Sex_on_the_Beach; // 3 c l
    int time_Vodka = 2700*Dichtung_Vodka * Menge_Sex_on_the_Beach; // 4 c l

    //Zeiten auslesen (für Testzwecke)
    Serial.println(time_OSaft);
    Serial.println(time_ASaft);
    Serial.println(time_ZSaft);
    Serial.println(time_Pfirsich_Likoer);
    Serial.println(time_Vodka);

```

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```

digitalWrite(LED, LOW);
digitalWrite(Pumpe_Orangensaft, LOW);
digitalWrite(Pumpe_Zitronensaft, LOW);
delay(time_ZSaft);
digitalWrite(Pumpe_Zitronensaft, HIGH);
digitalWrite(Pumpe_Ananassaft, LOW);
delay(time_ASaft);
digitalWrite(Pumpe_Ananassaft, HIGH);
delay(time_OSaft-(time_ASaft+time_ZSaft));
digitalWrite(Pumpe_Orangensaft, HIGH);
digitalWrite(Pumpe_Vodka, LOW);
digitalWrite(Pumpe_Pfirsich_Likoer, LOW);

if(time_Pfirsich_Likoer > time_Vodka)
{
    delay(time_Vodka);
    digitalWrite(Pumpe_Vodka, HIGH);
    delay(time_Pfirsich_Likoer-time_Vodka);
    digitalWrite(Pumpe_Pfirsich_Likoer, HIGH);
}

if(time_Pfirsich_Likoer < time_Vodka)
{
    delay(time_Pfirsich_Likoer);
    digitalWrite(Pumpe_Pfirsich_Likoer, HIGH);
    delay(time_Vodka-time_Pfirsich_Likoer);
    digitalWrite(Pumpe_Vodka, HIGH);
}

digitalWrite(LED, HIGH);
}

void Sex_on_the_Beach_Afrei() //17 cl + 3 cl Grenadine = 20 cl
{
    int time_OSaft = 5200*Dichtung_OSaft; // 10 cl
    int time_ASaft = 3000*Dichtung_ASaft; // 4 cl
    int time_ZSaft = 3600*Dichtung_ZSaft; // 3 cl

    digitalWrite(LED, LOW);
    digitalWrite(Pumpe_Orangensaft, LOW);
    digitalWrite(Pumpe_Ananassaft, LOW);
    digitalWrite(Pumpe_Zitronensaft, LOW);
    delay(time_ZSaft);
    digitalWrite(Pumpe_Zitronensaft, HIGH);
    delay(time_ASaft-time_ZSaft);
    digitalWrite(Pumpe_Ananassaft, HIGH);
    delay(time_OSaft-time_ASaft);
    digitalWrite(Pumpe_Orangensaft, HIGH);
    digitalWrite(LED, HIGH);
}

void Pina_Colada() // 20 cl + 3 cl kokossirup + 3 cl sahn = 26 cl
{
    digitalWrite(LED, LOW);
    digitalWrite(Pumpe_Barcadi, LOW);
    digitalWrite(Pumpe_Ananassaft, LOW);

    delay(2300*Dichtung_Barcadi); //2300 -> 4 cl Bacardi(perfekt abgedichtet)
    digitalWrite(Pumpe_Barcadi, HIGH);
    delay(8500*Dichtung_Barcadi-2300*Dichtung_ASaft); // 8500 -> 16 cl ASaft
    digitalWrite(Pumpe_Ananassaft, HIGH);
    digitalWrite(LED, HIGH);
}

```

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```
void Pina_Colada_Afrei()
{
  digitalWrite(LED, LOW);
  digitalWrite(Pumpe_Ananassaft, LOW);
  delay(10800*Dichtung_ASaft); // 20 cl
  digitalWrite(Pumpe_Ananassaft, HIGH);
  digitalWrite(LED, HIGH);
}

void Tequila_Sunrise()
{
  int time_OSaft = 7300*Dichtung_OSaft*0.8; // 16 cl warum 0,8?
  int time_Tequila = 4000*Dichtung_Tequila; // 4 cl

  digitalWrite(LED, LOW);
  digitalWrite(Pumpe_Orangensaft, LOW);
  digitalWrite(Pumpe_Tequila, LOW);
  delay(time_Tequila);
  digitalWrite(Pumpe_Tequila, HIGH);
  delay(time_OSaft);
  digitalWrite(Pumpe_Orangensaft, HIGH);
  digitalWrite(LED, HIGH);
}

void Tequila_Sunrise_Afrei()
{
  int time_OSaft = 10400*Dichtung_OSaft; // 20 cl

  digitalWrite(Pumpe_Orangensaft, LOW);
  delay(time_OSaft);
  digitalWrite(Pumpe_Orangensaft, HIGH);
  digitalWrite(LED, HIGH);
}

void Margarita() // 9 cl
{
  int time_Tequila = 3000*Dichtung_Tequila; // 3 cl
  int time_Triple_Sec = 4015*Dichtung_Triple_Sec; // 3 cl
  int time_ZSaft = 3600*Dichtung_ZSaft; // 3 cl
  // Ausgabe der Zeiten
  Serial.println(time_Tequila);
  Serial.println(time_Triple_Sec);
  Serial.println(time_ZSaft);

  digitalWrite(LED, LOW);
  digitalWrite(Pumpe_Tequila, LOW);
  digitalWrite(Pumpe_Triple_Sec, LOW);

  //digitalwrite(Pumpe_Zitronensaft, LOW); //wegen Spannungsabfall wird ZSaft am
  Ende Behandelt

  if(time_Tequila > time_Triple_Sec && time_ZSaft > time_Triple_Sec) // Triple
  Sec am wenigsten
  {
    delay(time_Triple_Sec);
    digitalWrite(Pumpe_Triple_Sec, HIGH);

    if(time_Tequila > time_ZSaft)
```

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```
{
    delay(time_ZSaft-time_Triple_Sec);
    digitalWrite(Pumpe_Zitronensaft, HIGH);
    delay(time_Tequila-time_ZSaft);
    digitalWrite(Pumpe_Tequila, HIGH);
}
if(time_Tequila < time_ZSaft)
{
    delay(time_Tequila-time_Triple_Sec);
    digitalWrite(Pumpe_Tequila, HIGH);
    delay(time_ZSaft-time_Tequila);
    digitalWrite(Pumpe_Zitronensaft, HIGH);
}
else
{
    delay(time_Tequila-time_Triple_Sec);
    digitalWrite(Pumpe_Tequila, HIGH);
    digitalWrite(Pumpe_Zitronensaft, HIGH);
}
}

else if((time_Triple_Sec > time_Tequila) && (time_ZSaft > time_Tequila)) //
Tequila am wenigsten
{
    delay(time_Tequila);
    digitalWrite(Pumpe_Tequila, HIGH);

    if(time_Triple_Sec > time_ZSaft)
    {
        delay(time_ZSaft-time_Tequila);
        digitalWrite(Pumpe_Zitronensaft, HIGH);
        delay(time_Triple_Sec-time_ZSaft);
        digitalWrite(Pumpe_Triple_Sec, HIGH);
    }
    if(time_Triple_Sec < time_ZSaft)
    {
        delay(time_Triple_Sec-time_Tequila);
        digitalWrite(Pumpe_Triple_Sec, HIGH);
        delay(time_ZSaft-time_Triple_Sec);
        digitalWrite(Pumpe_Zitronensaft, HIGH);
    }
    else
    {
        delay(time_Triple_Sec-time_Tequila);
        digitalWrite(Pumpe_Triple_Sec, HIGH);
        digitalWrite(Pumpe_Zitronensaft, HIGH);
    }
}

else if(time_Triple_Sec > time_ZSaft && time_Tequila > time_ZSaft) //
Zitronensaft am wenigsten
{
    delay(time_ZSaft);
    digitalWrite(Pumpe_Zitronensaft, HIGH);

    if(time_Triple_Sec > time_Tequila)
    {
        delay(time_Tequila-time_ZSaft);
        digitalWrite(Pumpe_Tequila, HIGH);
        delay(time_Triple_Sec-time_Tequila);
        digitalWrite(Pumpe_Triple_Sec, HIGH);
    }
    if(time_Triple_Sec < time_Tequila)
    {
        delay(time_Triple_Sec-time_ZSaft);
        digitalWrite(Pumpe_Triple_Sec, HIGH);
        delay(time_Tequila-time_Triple_Sec);
        digitalWrite(Pumpe_Tequila, HIGH);
    }
}
```



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```
    }
    else
    {
        delay(time_Triple_Sec-time_ZSaft);
        digitalWrite(Pumpe_Triple_Sec, HIGH);
        digitalWrite(Pumpe_Tequila, HIGH);
    }
}
else
{
    delay(time_ZSaft);
    digitalWrite(Pumpe_Zitronensaft, HIGH);
    digitalWrite(Pumpe_Triple_Sec, HIGH);
    digitalWrite(Pumpe_Tequila, HIGH);
}
//ZSaft zum Schluss wegen Spannungsabfall
digitalWrite(Pumpe_Zitronensaft, LOW);
delay(time_ZSaft);
digitalWrite(Pumpe_Zitronensaft, HIGH);

digitalWrite(LED, HIGH);
}
```

```
void Swimming_Pool() //20 cl + 3 cl Kokossirup + 3 cl Sahne = 26 cl
{
```

```
    digitalWrite(LED, LOW);
    digitalWrite(Pumpe_Vodka, LOW);
    digitalWrite(Pumpe_Blue_Curacao, LOW);
    digitalWrite(Pumpe_Ananassaft, LOW);
    delay(2000);
    digitalWrite(Pumpe_Vodka, HIGH); // 2000 -> 3 cl Vodka (perfekt abgedichtet)
    delay((3000-2000));
    digitalWrite(Pumpe_Blue_Curacao, HIGH); // 3500 -> 3 cl Blue_Curacao (schlecht
abgedichtet)
    delay((7500-3000)); // 7500 -> 14 cl Ananassaft (perfekt abgedichtet)
    digitalWrite(Pumpe_Ananassaft, HIGH);
    digitalWrite(LED, HIGH);
}
```

```
void whiskey_Sour() //7,5 cl + 2 cl Zuckersirup = 9,5 cl
{
```

```
    int time_Whisky = 2700*Dichtung_Whisky;
    int time_ZSaft = 3600*Dichtung_ZSaft;

    digitalWrite(LED, LOW);
    digitalWrite(Pumpe_Whiskey, LOW);
    digitalWrite(Pumpe_Zitronensaft, LOW);

    if(time_Whisky < time_ZSaft)
    {
        delay(time_Whisky); // 2700 -> 4,5 cl whiskey (gut abgedichtet)
        digitalWrite(Pumpe_Whiskey, HIGH);
        delay(time_ZSaft-time_Whisky); // 3600 -> 3 cl Zitronensaft (schlecht
abgedichtet)
        digitalWrite(Pumpe_Zitronensaft, HIGH);
        digitalWrite(LED, HIGH);
    }

    if(time_Whisky > time_ZSaft)
    {
        delay(time_ZSaft);
        digitalWrite(Pumpe_Zitronensaft, HIGH);
        delay(time_Whisky-time_ZSaft);
```

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```

digitalWrite(Pumpe_Whiskey, HIGH);
}
else
{
delay(time_ZSaft);
digitalWrite(Pumpe_Whiskey, HIGH);
digitalWrite(Pumpe_Zitronensaft, HIGH);
}
digitalWrite(LED, HIGH);
}

void Long_Island_Ice_Tea()
{
int time_Tequila = 2100*Dichtung_Tequila; // 2 c1 ok
int time_Triple_Sec = 2800*Dichtung_Triple_Sec; // 2 c1
int time_ZSaft = 2700*Dichtung_ZSaft; // 2 c1
int time_Vodka = 2700*Dichtung_Vodka; // 4 c1
int time_Gin = 1036*Dichtung_Gin; // 2 c1
int time_Barcadi = 1079*Dichtung_Barcadi; // 2 c1

//für die Sortierung
Serial.println("Tequila");
Serial.println(time_Tequila);
Serial.println("Triple Sec");
Serial.println(time_Triple_Sec);
Serial.println("ZSaft");
Serial.println(time_ZSaft);
Serial.println("Vodka");
Serial.println(time_Vodka);
Serial.println("Gin");
Serial.println(time_Gin);
Serial.println("Barcadi");
Serial.println(time_Barcadi);

digitalWrite(LED, LOW);
digitalWrite(Pumpe_Zitronensaft, LOW);
digitalWrite(Pumpe_Tequila, LOW);
if(time_ZSaft < time_Tequila)
{
delay(time_ZSaft);
digitalWrite(Pumpe_Zitronensaft, HIGH);
delay(time_Tequila-time_ZSaft);
digitalWrite(Pumpe_Tequila, HIGH);
}
if(time_ZSaft > time_Tequila)
{
delay(time_Tequila);
digitalWrite(Pumpe_Tequila, HIGH);
delay(time_ZSaft-time_Tequila);
digitalWrite(Pumpe_Zitronensaft, HIGH);
}
else
{
delay(time_Tequila);
digitalWrite(Pumpe_Tequila, HIGH);
digitalWrite(Pumpe_Zitronensaft, HIGH);
}
delay(10);

digitalWrite(Pumpe_Vodka, LOW);
digitalWrite(Pumpe_Triple_Sec, LOW);

if(time_Vodka < time_Triple_Sec)
{
delay(time_Vodka);
digitalWrite(Pumpe_Vodka, HIGH);
}
}

```

## Arduino Programmcode

```
delay(time_Triple_Sec-time_Vodka);
digitalWrite(Pumpe_Triple_Sec, HIGH);
}
if(time_Vodka > time_Triple_Sec)
{
delay(time_Triple_Sec);
digitalWrite(Pumpe_Triple_Sec, HIGH);
delay(time_Vodka-time_Triple_Sec);
digitalWrite(Pumpe_Vodka, HIGH);
}
else
{
delay(time_Triple_Sec);
digitalWrite(Pumpe_Triple_Sec, HIGH);
digitalWrite(Pumpe_Vodka, HIGH);
}
delay(10);

digitalWrite(Pumpe_Gin, LOW);
digitalWrite(Pumpe_Barcadi, LOW);

if(time_Gin < time_Barcadi)
{
delay(time_Gin);
digitalWrite(Pumpe_Gin, HIGH);
delay(time_Barcadi-time_Gin);
digitalWrite(Pumpe_Barcadi, HIGH);
}
if(time_Gin > time_Barcadi)
{
delay(time_Barcadi);
digitalWrite(Pumpe_Barcadi, HIGH);
delay(time_Gin-time_Barcadi);
digitalWrite(Pumpe_Gin, HIGH);
}
else
{
delay(time_Barcadi);
digitalWrite(Pumpe_Gin, HIGH);
digitalWrite(Pumpe_Barcadi, HIGH);
}

digitalWrite(LED, HIGH);
}
```