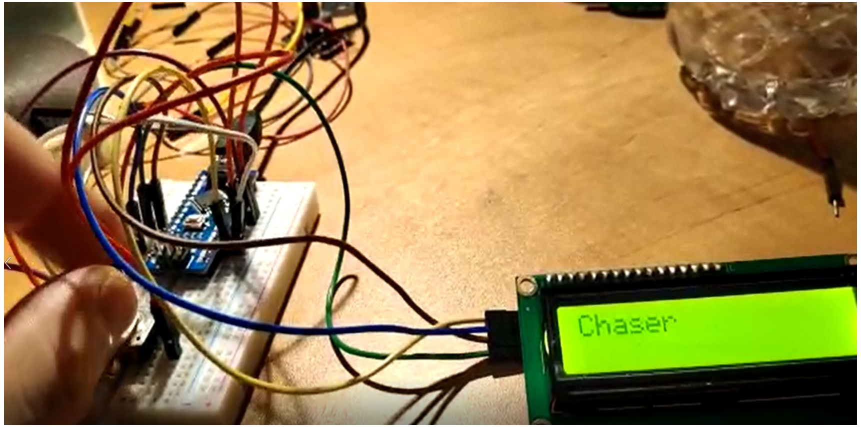
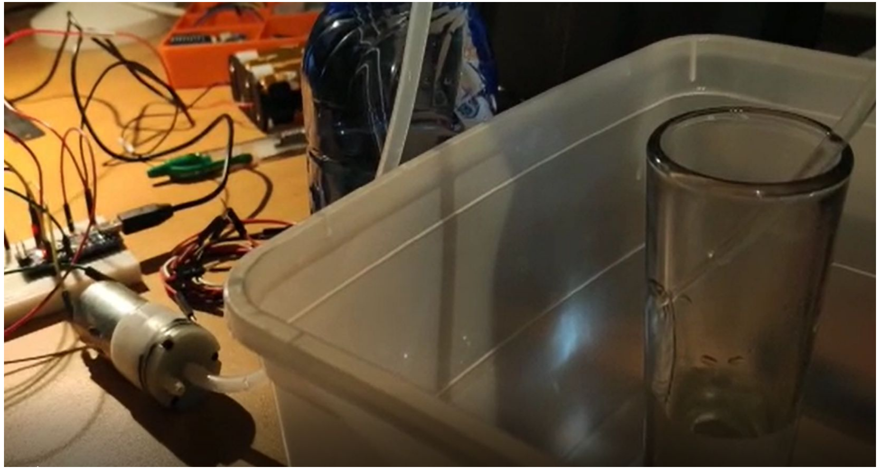
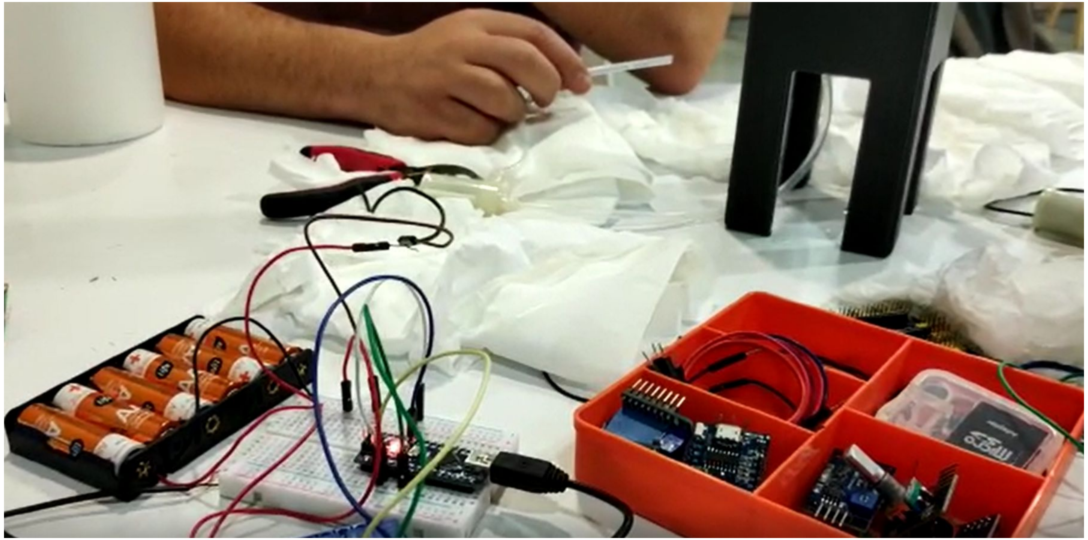
The Bartender

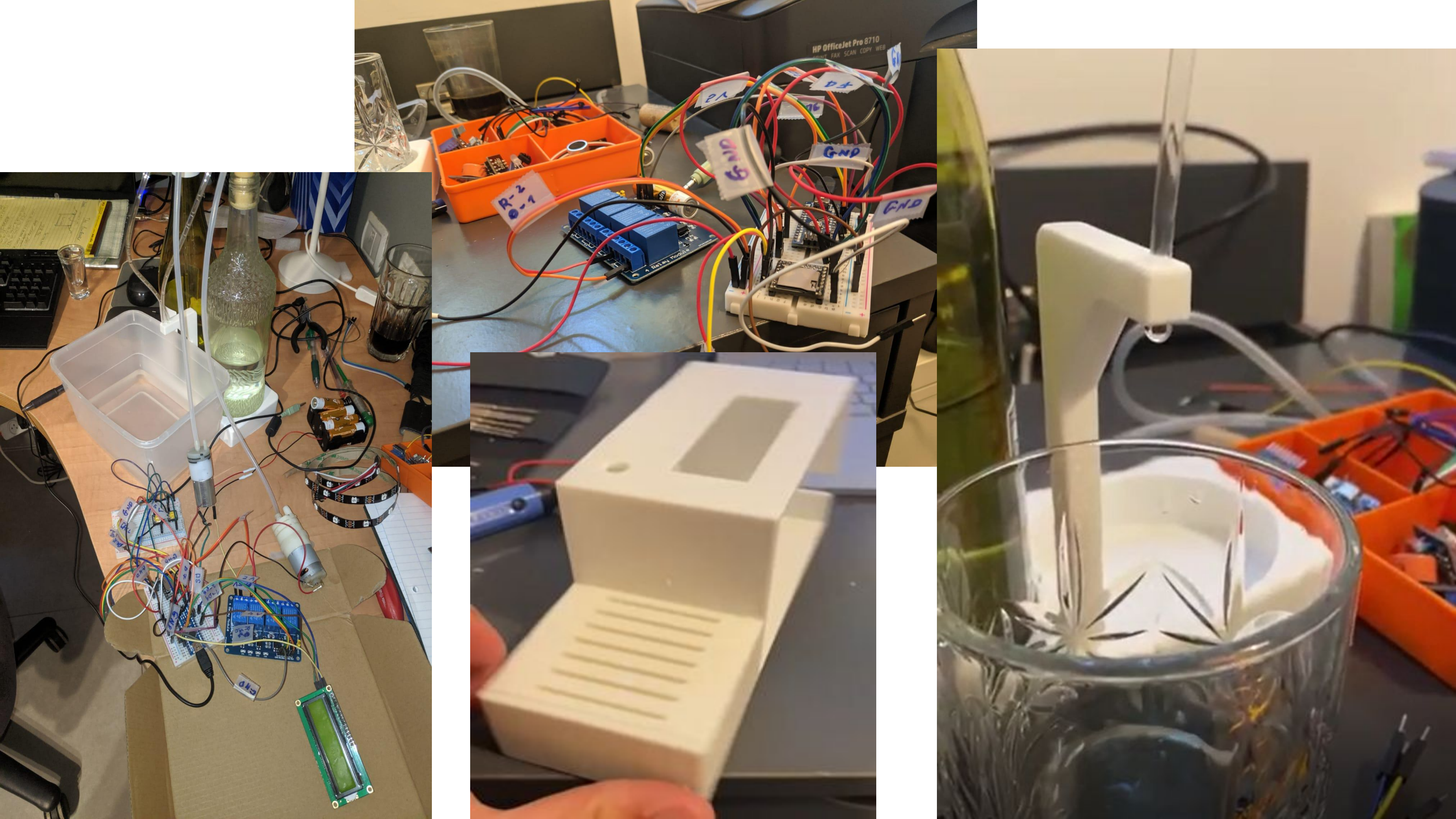
Alon Ronder
Moral Timor


Chaser

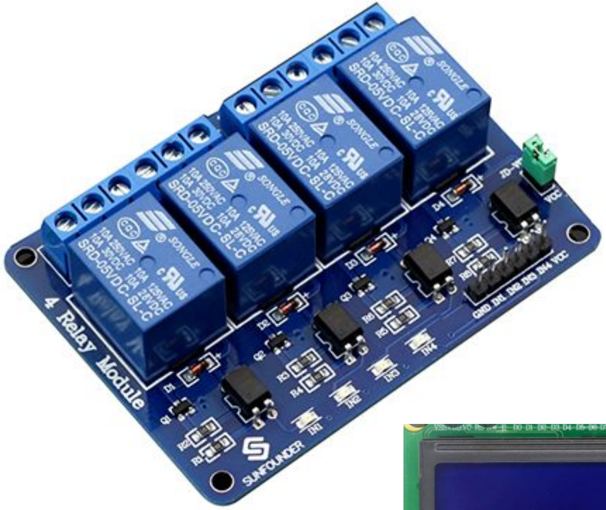




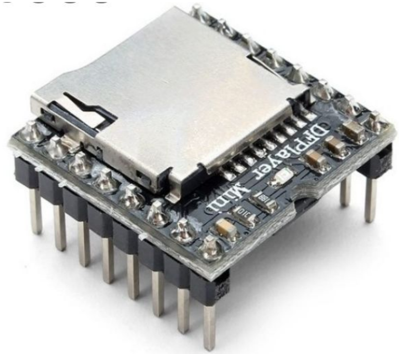
Cheers
Man

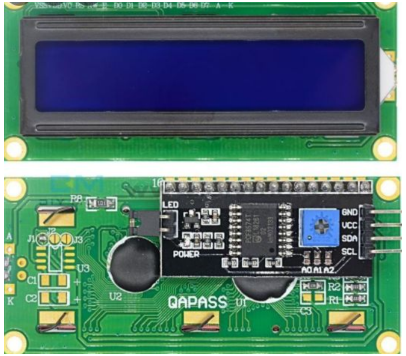

HP OfficeJet Pro 8710
PRINT FAX SCAN COPY WEB
R-2
0-1
GND
GND
GND
GND
4 Relay Module

הרכיבים


4 Relay Module
SUNFOUNDER

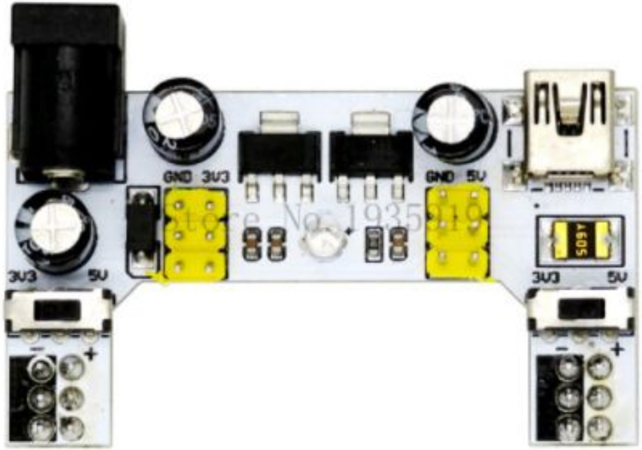
ARDUINO NANO V3.1
ARDUINO.CC
GRAVITECH.US


DFPlayer Mini


GND
VCC
SDA
SCL
QAPASS

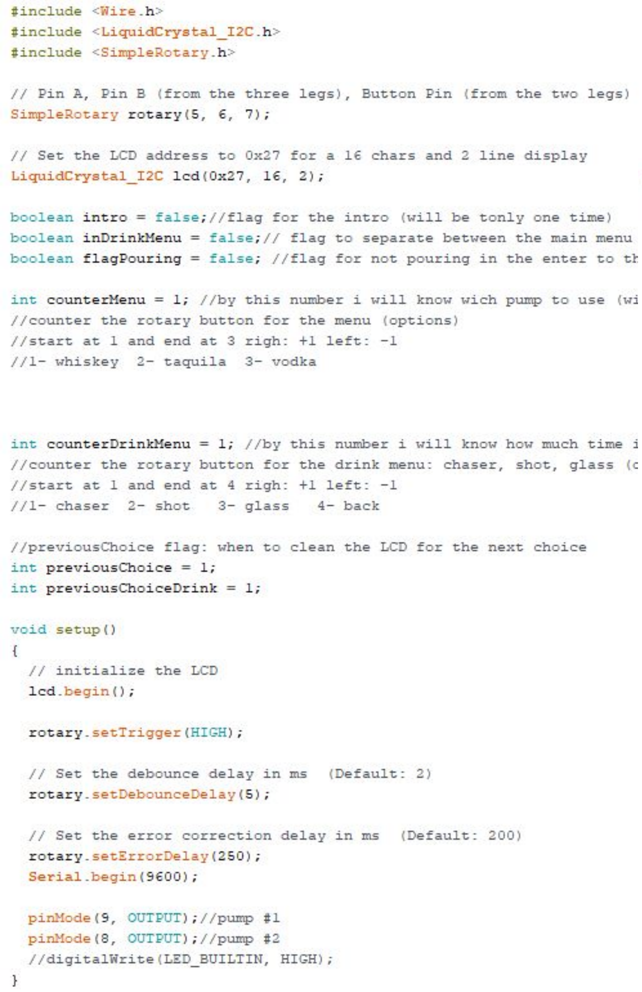
JBL

חשמל

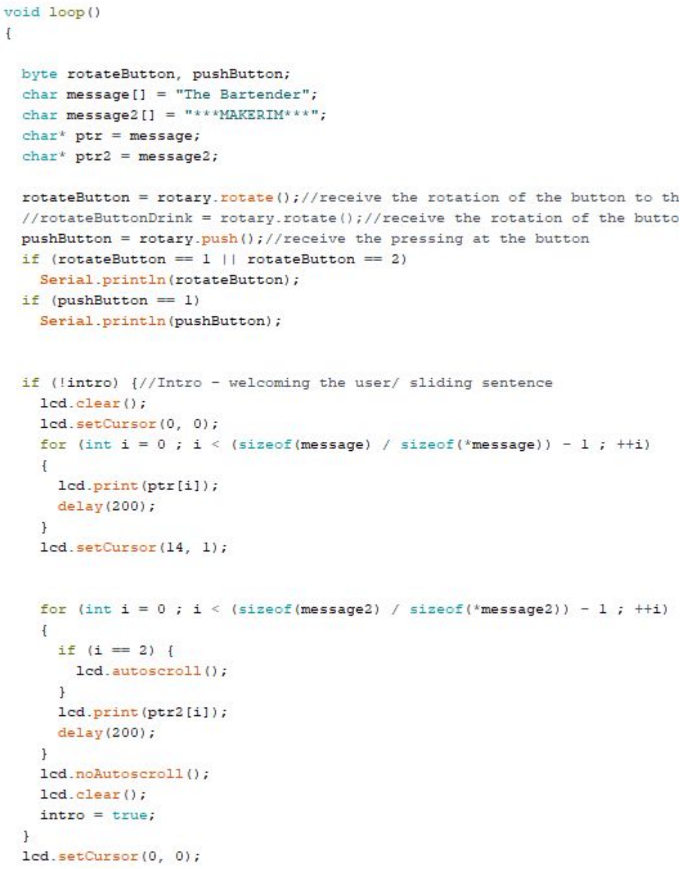

GND 3V3
GND 5V
3V3 5V
3V3 5V
- +
- +

D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 GND RST RX0 TX1
ICSP
TX
RX
PWR
L
ARDUINO.CC
RESET
USA
2011
ARDUINO
NANO
V3.1
GRAVITECH.US
1
D13 3V3 REF A0 A1 A2 A3 A4 A5 A6 A7 5V RST GND VIN

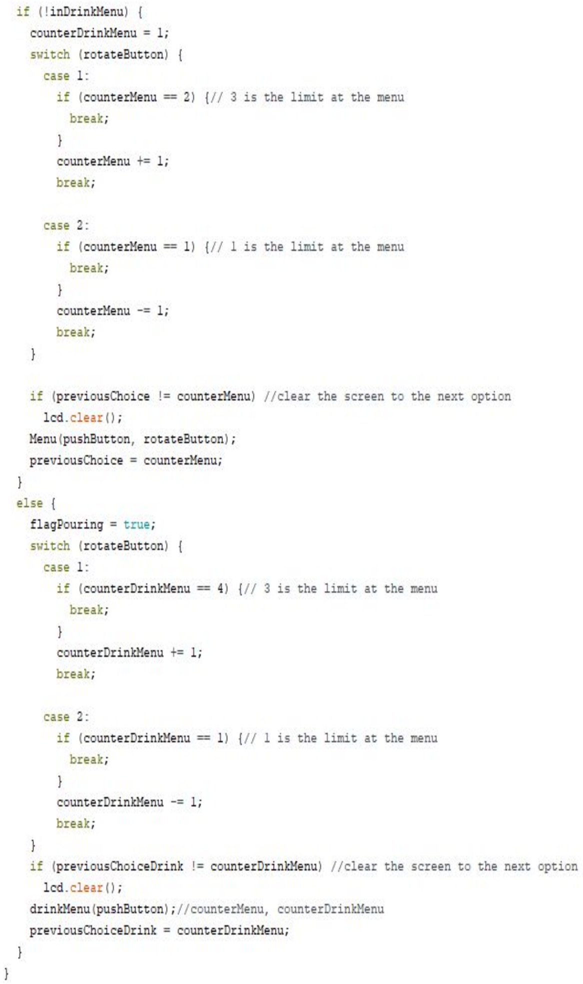
קוד



```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
#include <SimpleRotary.h>

// Pin A, Pin B (from the three legs), Button Pin (from the two legs)
SimpleRotary rotary(5, 6, 7);

// Set the LCD address to 0x27 for a 16 chars and 2 line display
LiquidCrystal_I2C lcd(0x27, 16, 2);

boolean intro = false;//flag for the intro (will be tonly one time)
boolean inDrinkMenu = false;// flag to separate between the main menu
boolean flagPouring = false; //flag for not pouring in the enter to th

int counterMenu = 1; //by this number i will know wich pump to use (wi
//counter the rotary button for the menu (options)
//start at 1 and end at 3 righ: +1 left: -1
//1- whiskey  2- taquila  3- vodka



int counterDrinkMenu = 1; //by this number i will know how much time i
//counter the rotary button for the drink menu: chaser, shot, glass (c
//start at 1 and end at 4 righ: +1 left: -1
//1- chaser  2- shot   3- glass   4- back

//previousChoice flag: when to clean the LCD for the next choice
int previousChoice = 1;
int previousChoiceDrink = 1;

void setup()
{
  // initialize the LCD
  lcd.begin();

  rotary.setTrigger(HIGH);

  // Set the debounce delay in ms  (Default: 2)
  rotary.setDebounceDelay(5);

  // Set the error correction delay in ms  (Default: 200)
  rotary.setErrorDelay(250);
  Serial.begin(9600);

  pinMode(9, OUTPUT);//pump #1
  pinMode(8, OUTPUT);//pump #2
  //digitalWrite(LED_BUILTIN, HIGH);
}
```

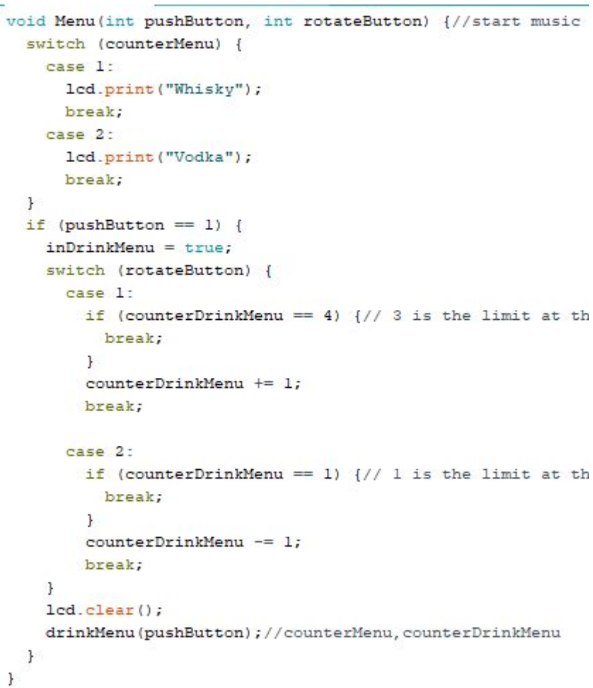


```
void loop()
{

  byte rotateButton, pushButton;
  char message[] = "The Bartender";
  char message2[] = "***MAKERIM***";
  char* ptr = message;
  char* ptr2 = message2;

  rotateButton = rotary.rotate();//receive the rotation of the button to th
  //rotateButtonDrink = rotary.rotate();//receive the rotation of the butto
  pushButton = rotary.push();//receive the pressing at the button
  if (rotateButton == 1 || rotateButton == 2)
    Serial.println(rotateButton);
  if (pushButton == 1)
    Serial.println(pushButton);


  if (!intro) {//Intro - welcoming the user/ sliding sentence
    lcd.clear();
    lcd.setCursor(0, 0);
    for (int i = 0 ; i < (sizeof(message) / sizeof(*message)) - 1 ; ++i)
    {
      lcd.print(ptr[i]);
      delay(200);
    }
    lcd.setCursor(14, 1);


    for (int i = 0 ; i < (sizeof(message2) / sizeof(*message2)) - 1 ; ++i)
    {
      if (i == 2) {
        lcd.autoscroll();
      }
      lcd.print(ptr2[i]);
      delay(200);
    }
    lcd.noAutoscroll();
    lcd.clear();
    intro = true;
  }
  lcd.setCursor(0, 0);
```

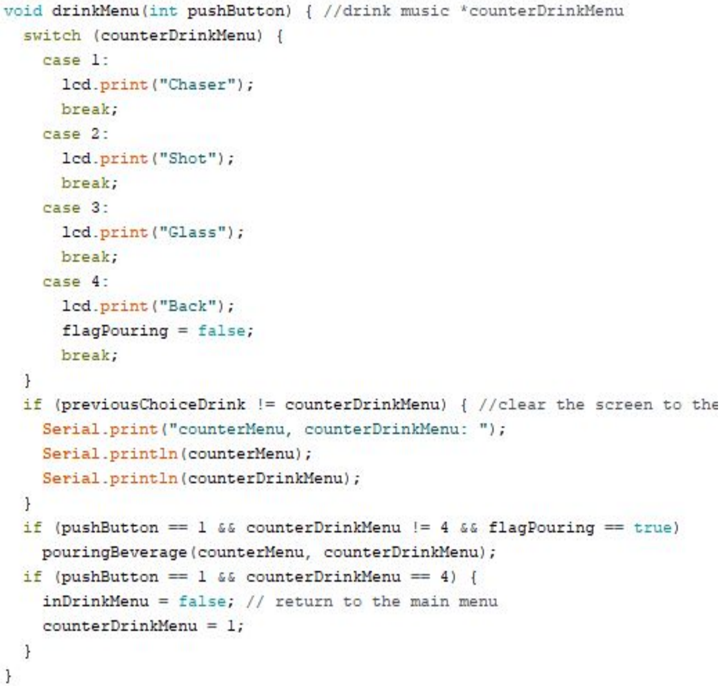


```
  if (!inDrinkMenu) {
    counterDrinkMenu = 1;
    switch (rotateButton) {
      case 1:
        if (counterMenu == 2) {// 3 is the limit at the menu
          break;
        }
        counterMenu += 1;
        break;

      case 2:
        if (counterMenu == 1) {// 1 is the limit at the menu
          break;
        }
        counterMenu -= 1;
        break;
    }

    if (previousChoice != counterMenu) //clear the screen to the next option
      lcd.clear();
    Menu(pushButton, rotateButton);
    previousChoice = counterMenu;
  }
  else {
    flagPouring = true;
    switch (rotateButton) {
      case 1:
        if (counterDrinkMenu == 4) {// 3 is the limit at the menu
          break;
        }
        counterDrinkMenu += 1;
        break;

      case 2:
        if (counterDrinkMenu == 1) {// 1 is the limit at the menu
          break;
        }
        counterDrinkMenu -= 1;
        break;
    }
    if (previousChoiceDrink != counterDrinkMenu) //clear the screen to the next option
      lcd.clear();
    drinkMenu(pushButton);//counterMenu, counterDrinkMenu
    previousChoiceDrink = counterDrinkMenu;
  }
}
```

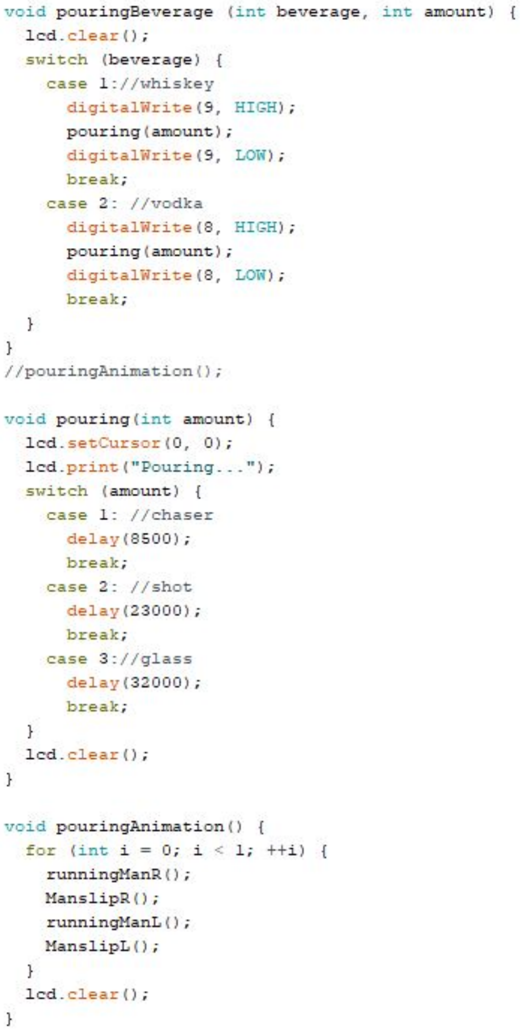
קוד - פונקציות



```
void Menu(int pushButton, int rotateButton) {//start music
  switch (counterMenu) {
    case 1:
      lcd.print("Whisky");
      break;
    case 2:
      lcd.print("Vodka");
      break;
  }
  if (pushButton == 1) {
    inDrinkMenu = true;
    switch (rotateButton) {
      case 1:
        if (counterDrinkMenu == 4) {// 3 is the limit at th
          break;
        }
        counterDrinkMenu += 1;
        break;

      case 2:
        if (counterDrinkMenu == 1) {// 1 is the limit at th
          break;
        }
        counterDrinkMenu -= 1;
        break;
    }
    lcd.clear();
    drinkMenu(pushButton);//counterMenu,counterDrinkMenu
  }
}
```



```
void drinkMenu(int pushButton) { //drink music *counterDrinkMenu
  switch (counterDrinkMenu) {
    case 1:
      lcd.print("Chaser");
      break;
    case 2:
      lcd.print("Shot");
      break;
    case 3:
      lcd.print("Glass");
      break;
    case 4:
      lcd.print("Back");
      flagPouring = false;
      break;
  }
  if (previousChoiceDrink != counterDrinkMenu) { //clear the screen to the
    Serial.print("counterMenu, counterDrinkMenu: ");
    Serial.println(counterMenu);
    Serial.println(counterDrinkMenu);
  }
  if (pushButton == 1 && counterDrinkMenu != 4 && flagPouring == true)
    pouringBeverage(counterMenu, counterDrinkMenu);
  if (pushButton == 1 && counterDrinkMenu == 4) {
    inDrinkMenu = false; // return to the main menu
    counterDrinkMenu = 1;
  }
}
```



```
void pouringBeverage (int beverage, int amount) {
  lcd.clear();
  switch (beverage) {
    case 1://whiskey
      digitalWrite(9, HIGH);
      pouring(amount);
      digitalWrite(9, LOW);
      break;
    case 2: //vodka
      digitalWrite(8, HIGH);
      pouring(amount);
      digitalWrite(8, LOW);
      break;
  }
}
//pouringAnimation();

void pouring(int amount) {
  lcd.setCursor(0, 0);
  lcd.print("Pouring...");
  switch (amount) {
    case 1: //chaser
      delay(8500);
      break;
    case 2: //shot
      delay(23000);
      break;
    case 3://glass
      delay(32000);
      break;
  }
  lcd.clear();
}

void pouringAnimation() {
  for (int i = 0; i < 1; ++i) {
    runningManR();
    ManslipR();
    runningManL();
    ManslipL();
  }
  lcd.clear();
}
```