```cpp
float lectura0, lectura1, lectura2, lectura3, lectura4, lectura5,
lectura6, lectura7;   // Definition of each of the variables that will be
used to read each pin used
float volt0, volt1, volt2, volt3, volt4, volt5, volt6,
volt7;                          // Definition of the variables used to
determine the voltatge that goes through each of the cables
float lim =
1;
// Definition of the voltatge limit that each connexion has to pass in
order to make the action we want
float j0_angle =
0;                                                           //
Definition and initiallization of the variable that will regulate the
angle made by the J0 part of the arm
float j1_angle =
0;                                                           //
Definition and initiallization of the variable that will regulate the
angle made by the J1 part of the arm
float j2_angle =
0;                                                           //
Definition and initiallization of the variable that will regulate the
angle made by the J2 part of the arm
float j3_angle =
0;                                                           //
Definition and initiallization of the variable that will regulate the
angle made by the J3 part of the arm
float j4_angle =
0;                                                           //
Definition and initiallization of the variable that will regulate the
angle made by the J4 part of the arm
// Define angle limits
float minrot0 = -360, maxrot0 = 360;  //J0 part angle limits
float minrot1 = 30, maxrot1 = 90;     //J1 part angle limits
float minrot2 = -120, maxrot2 = -60;  //J2 part angle limits
float minrot3 = -360, maxrot3 = 360;  //J3 part angle limits
float minrot4 = -60, maxrot4 = 60;    //J4 part angle limits

void setup() {
  pinMode(A0, INPUT);    // definition of pin A0 as an input
  pinMode(A1, INPUT);    // definition of pin A1 as an input
  pinMode(A2, INPUT);    // definition of pin A2 as an input
  pinMode(A3, INPUT);    // definition of pin A3 as an input
  pinMode(A4, INPUT);    // definition of pin A4 as an input
  pinMode(A5, INPUT);    // definition of pin A5 as an input
  Serial.begin(115200);  // we use this to set the data rate in bits per
second, for serial data transmission
}

void loop() {
```

```cpp
  lectura0 = analogRead(A0);      //we set the variable for the first
lecture in pin A0
  volt0 = lectura0 / 1023 * 5.0;  //we set the volt recieved by the first
finger as the division of the lecture of the first pin by a translation
of the voltatge up to 5V because that is what our board supports

  lectura3 = analogRead(A3);      //we set the variable for the second
lecture in pin A1
  volt3 = lectura3 / 1023 * 5.0;  //we set the volt recieved by the
second finger as the division of the lecture of the second pin by a
translation of the voltatge up to 5V because that is what our board
supports

  lectura1 = analogRead(A1);      //we set the variable for the third
lecture in pin A2
  volt1 = lectura1 / 1023 * 5.0;  //we set the volt recieved by the third
finger as the division of the lecture of the third pin by a translation
of the voltatge up to 5V because that is what our board supports

  lectura4 = analogRead(A4);      //we set the variable for the fourth
lecture in pin A3
  volt4 = lectura4 / 1023 * 5.0;  //we set the volt recieved by the
fourth finger as the division of the lecture of the fourth pin by a
translation of the voltatge up to 5V because that is what our board
supports

  lectura2 = analogRead(A2);      //we set the variable for the fifth
lecture in pin A4
  volt2 = lectura2 / 1023 * 5.0;  //we set the volt recieved by the fifth
finger as the division of the lecture of the fifth pin by a translation
of the voltatge up to 5V because that is what our board supports

  lectura5 = analogRead(A5);      //we set the variable for the sixth
lecture in pin A5
  volt5 = lectura5 / 1023 * 5.0;  //we set the volt recieved by the sixth
finger as the division of the lecture of the sixth pin by a translation
of the voltatge up to 5V because that is what our board supports

  if (volt0 >= lim && volt1 < lim && volt2 < lim) {  //when the voltatge
received by the first connection is higher than the limit, and the other
two in that hand are lower than it,
    j0_angle += 5;                              //turn the first
part 90 degrees
    Serial.println("J0_" + String(j0_angle, 3));     //print J0_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                            // send everything
    delay(1000);                               // wait for messages
to be sent
```

```arduino
  }

  if (volt3 >= lim && volt4 < lim && volt5 < lim) {   //when the voltatge
received by the fourth connection is higher than the limit, and the other
two in that hand are lower than it,
    j0_angle -= 5;                          //turn the first part
minus 90 degrees
    Serial.println("J0_" + String(j0_angle, 3));      //print J0_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                         // send everything
    delay(1000);                            // wait for messages
to be sent
  }

  if (volt1 >= lim && volt0 < lim && volt2 < lim) {   //when the voltatge
received by the second connection is higher than the limit, and the other
two in that hand are lower than it,
    j1_angle += 5;                          //turn the second
part 60 degrees
    Serial.println("J1_" + String(j1_angle, 3));      //print J1_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                         // send everything
    delay(1000);                            // wait for messages
to be sent
  }

  if (volt4 >= lim && volt3 < lim && volt5 < lim) {   //when the voltatge
received by the fifth connection is higher than the limit, and the other
two in that hand are lower than it,
    j1_angle -= 5;                          //turn the second
part minus 60 degrees
    Serial.println("J1_" + String(j1_angle, 3));      //print J1_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                         // send everything
    delay(1000);                            // wait for messages
to be sent
  }

  if (volt2 >= lim && volt1 < lim && volt0 < lim) {   //when the voltatge
received by the third connection is higher than the limit, and the other
two in that hand are lower than it,
    j2_angle += 5;                          //turn the third
part 30 degrees
```

```arduino
    Serial.println("J2_" + String(j2_angle, 3));      //print J2_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                                   // send everything
    delay(1000);                                      // wait for messages
to be sent
  }

  if (volt5 >= lim && volt3 < lim && volt4 < lim) {   //when the voltatge
received by the sixth connection is higher than the limit, and the other
two in that hand are lower than it,
    j2_angle -= 5;                                    //turn the third part
minus 30 degrees
    Serial.println("J2_" + String(j2_angle, 3));      //print J2_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                                   // send everything
    delay(1000);                                      // wait for messages
to be sent
  }

  if (volt0 >= lim && volt1 >= lim) {                 //when the voltatge
received by the first and second connections at the same time is higher
than the limit,
    j3_angle += 5;                                    //turn the fourth part
75 degrees
    Serial.println("J3_" + String(j3_angle, 3));  //print J3_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                                   // send everything
    delay(1000);                                      // wait for messages to
be sent
  }

  if (volt3 >= lim && volt4 >= lim) {                 //when the voltatge
received by the fourth and fifth connections at the same time is higher
than the limit,
    j3_angle -= 5;                                    //turn the fourth part
minus 75 degrees
    Serial.println("J3_" + String(j3_angle, 3));  //print J3_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                                   // send everything
    delay(1000);                                      // wait for messages to
be sent
  }
```

```cpp
  if (volt1 >= lim && volt2 >= lim) {              //when the voltatge
received by the second and third connections at the same time is higher
than the limit,
    j4_angle += 5;                                 //turn the fifth part
45 degrees
    Serial.println("J4_" + String(j4_angle, 3));   //print J4_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                                // send everything
    delay(1000);                                   // wait for messages to
be sent
  }

  if (volt4 >= lim && volt5 >= lim) {              //when the voltatge
received by the fifth and sixth connections at the same time is higher
than the limit,
    j4_angle -= 5;                                 //turn the fifth part
minus 45 degrees
    Serial.println("J4_" + String(j4_angle, 3));   //print J4_, for
processing to understand this order, and turn the correct part the
degrees we have set above
    Serial.flush();                                // send everything
    delay(1000);                                   // wait for messages to
be sent
  }
}
```