

## Prosthetic Hand v1 Code

```
#include <Servo.h>

int thumb=0;
int finger1=1;
int finger2=2;
int finger3=3;
int finger4=4;
int bend=5;

int thumbmax=550;
int thumbmin=350;
int f1max=470; //update these
int f1min=270;
int f2max=550;
int f2min=350;
int f3max=550;
int f3min=350;
int f4max=540;
int f4min=280;

Servo tservo,servo1,servo2,servo3,servo4;
//450-170 black side

//thumb- 350-550
//index- 270-470
//middle 350-550
//ring 350-550
//smallest 280-540

void setup()
{
  pinMode(thumb,INPUT);
  pinMode(finger1,INPUT);
  pinMode(finger2,INPUT);
  pinMode(finger3,INPUT);
  pinMode(finger4,INPUT);

  tservo.attach(6);
  servo1.attach(2);
  servo2.attach(3);
  servo3.attach(4);
  servo4.attach(5);

  Serial.begin(9600);
}

void loop()
{
  int values[5];
  int value=analogRead(6);
  values[0]=map(value,thumbmin,thumbmax,0,180);
```

```
value=analogRead(2);
values[1]=map(value,f1min,f2max,0,180);
value=analogRead(3);
values[2]=map(value,f2min,f2max,0,180);
value=analogRead(4);
values[3]=map(value,f3min,f3max,0,180);
value=analogRead(5);
values[4]=map(value,f4min,f4max,0,180);
servo1.write(values[1]);
servo2.write(values[2]);
servo3.write(values[3]);
servo4.write(values[4]);
tservo.write(values[0]);
/*Serial.print(values[0]);
Serial.print(" ");
/*Serial.print(values[1]);
Serial.print(" ");
Serial.print(values[2]);
Serial.print(" ");
Serial.print(values[3]);
Serial.print(" ");
Serial.print(values[4]);*/
//Serial.print("\n");
//servo1.write(values[0]);

delay(100);
}
```