Session 9

I started by defining the list of handles that our arm can open crutch handle, button handle, L key handle.

Initially omits the pull handles which would require a torque exceeding that of our current servomotors as well as a backward movement.

Done, I start modeling the pliers by refining the tips to be able to grab the handle as well as possible, the impression will be launched at the next session.

In parallel, to set up an optimized code, I continue by defining the limits of movement of my angles, the mapping of the motors produced, I resume writing the code.

```
4  Servo servo2;
5  Servo servo3;
6  Servo servo4;
7
8  // Robot arm initial position
9    servo1PPos = 90;
0    servo01.write(servo1PPos);
1    servo2PPos = 150;
2    servo02.write(servo2PPos);
3    servo3PPos = 35;
4    servo03.write(servo3PPos);
5    servo4PPos = 140;
6    servo04.write(servo4PPos);
7
8  void setup() {
9    // put your setup code here, to run once:
0    servo1.attach(A0);// num min max 544= 0° et 2400=90°
1    // If previous position is smaller then current position
2    //move Servo1
3        if (servo1PPos < servo1Pos) {
4          for ( int j = servo1PPos; j <= servo1Pos; j++) {    // Run servo up
5            servo01.write(j);
6            delay(20);
7          }
8          }
9      servo1PPos = servo1Pos;    // set current position as previous position
```

Fig 1s Code's sketch

First, the code will be written without class then test to debug then a Servomotors class will be defined with functions like: StartMotor, RotateRight, RotateLeft …
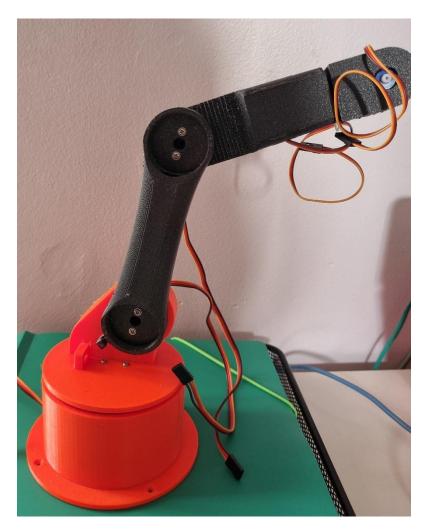
Fig 2 : First arm look