How to connect the sensors to the Arduino

How the potentiometers are connected

Part	GND	VCC	SIG
Upper Arm	Grey	Pink	Blue
Middle Arm	Pink	Grey	White
Lower Arm	Grey	Pink	Blue

Lower arm wire connections:

Blue -> Blue -> Blue -> A2

Pink -> Pink -> Pink -> Grey + (VCC 5V) on Breadboard

Grey -> Grey -> - (GND) on Breadboard

Middle arm wire connections:

Pink -> Pink -> - (GND) on Breadboard

Grey -> Grey -> + (VCC 5V) on Breadboard

White -> White -> A1

Lower arm wire connections:

Blue -> Yellow -> Yellow -> A0

Pink -> Orange -> Orange -> - (GND) on Breadboard

Grey -> Red -> Red -> + (VCC 5V) on Breadboard

How the weight sensor (load cell) is connected

Sensor	GND	DT	SCK	VCC
Weight	Red	Grey	Black	White

Weight sensor wire connections

Red -> Green with black tape -> - (GND) on Breadboard

Grey -> Green -> Digital 4

Black -> Grey -> Digital 5

White -> Yellow -> + (VCC 5V) on Breadboard

How the rotation sensor (6-axis sensor) is connected

Sensor	INT	ADO	SDA	SCL	GND	VCC
Rotation	Black	White	Brown	Red	Orange	Yellow

Rotation senor wire connections:

Black -> Brown -> Brown -> Digital 7

White -> Brown -> - (GND) on Breadboard

Brown -> Red -> Breadboard -> White connected on the same line on breadboard as Red -> SDA

Red -> Orange -> Breadboard -> Black connected on the same line on breadboard as Orange -> SCL

Orange -> Yellow -> - (GND) on Breadboard

Yellow -> Green -> + (VCC 3.3V) on Breadboard

The Rotation sensor is not set up to work since it causes some problems when the runtime exceeds ca. 5 minutes. You need to disconnect the cables going into SDA and SCL on the Arduino to make it work for fluently for a long time.

From the breadboard do you connect one wire from the + row (where the weight and arm sensors are connected) to the 5v port on the Arduino and 1 from the – row to GND port on the Arduino.

You do the same for the other side of the breadboard (with + and -), but here are + on the breadboard connected to the 3.3V on the Arduino.