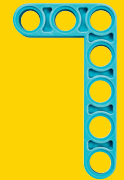# Greetings, Earthling

Build a robot that greets people with a wave, a fist bump, a high-five or some other welcoming movement!

Think Like an Engineer:
How can you position a motor so that the arm moves in a more natural way?

Think Like an Artist:
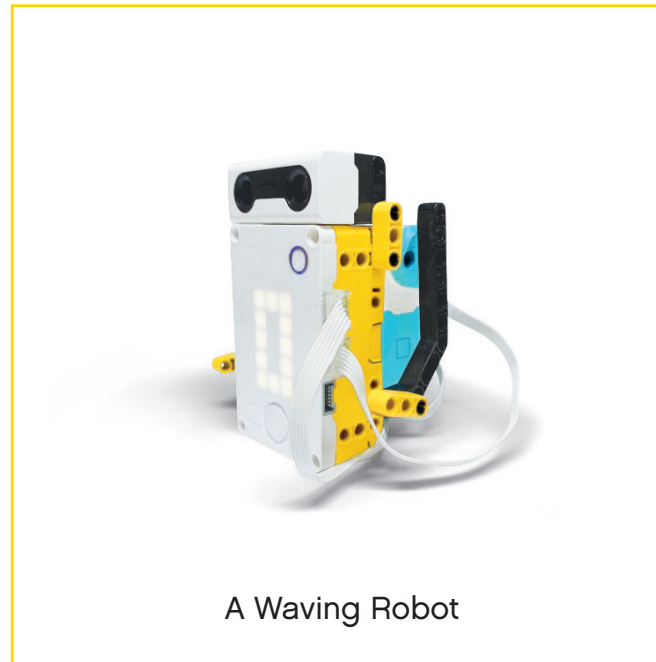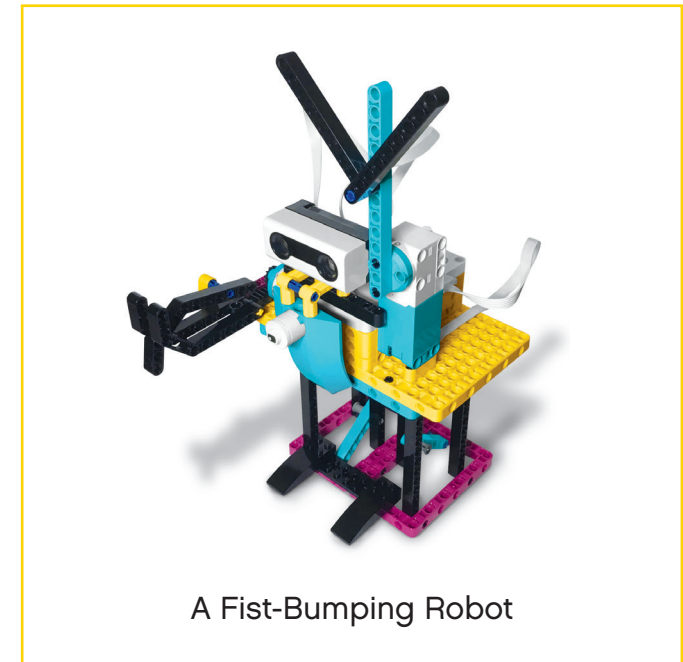How can you make the robot look more friendly and approachable?

Example Ideas
How do you want your robot to greet you?

A High-Fiving Robot

A Waving Robot

A Fist-Bumping Robot

● Beginner   ✕ All Skills   ⚙ Mechanics & Movement

Build It!

What elements do you want to add to the robot?

You can add a piece at the end of the arm to act as a hand.

The ultrasonic sensor looks like eyes and can automate movement.

This hand looks realistic with "fingers."

Code It!

Think about how much you want the robot to move.
Do you want to measure by time or rotations?

```
1  from spike import Motor
2  motor=Motor('A')
3  for i in range(10):
4      #Run the motor 180 degrees clockwise at 50% speed
5      motor.run_for_degrees(180, 50)
6      #Run the motor 180 degrees counterclockwise at 50% speed
7      motor.run_for_degrees(180, 50)
```

You can connect "X" shaped pieces to make a scissor lift for the extendable arm.

Challenge Yourself!

Try to use an ultrasonic sensor to have the robot move only when someone is in front of it.