

Sure, here's an example of how to move 6 servo motors using code:

```
```cpp
// Include necessary library
#include <Servo.h>

// Define variables for the servo motors
Servo servo1, servo2, servo3, servo4, servo5, servo6;

// Define the pins for each servo motor
int servo1_pin = 2;
int servo2_pin = 3;
int servo3_pin = 4;
int servo4_pin = 5;
int servo5_pin = 6;
int servo6_pin = 7;

void setup() {
 // Attach the servo motors to their respective pins
 servo1.attach(servo1_pin);
 servo2.attach(servo2_pin);
 servo3.attach(servo3_pin);
 servo4.attach(servo4_pin);
 servo5.attach(servo5_pin);
 servo6.attach(servo6_pin);
}

void loop() {
 // Move the servo motors to different positions
 moveServos(0, 30, 60, 90, 120, 150); // Move to these positions
 delay(1000); // Wait for 1 second

 moveServos(180, 150, 120, 90, 60, 30); // Move to these positions
 delay(1000); // Wait for 1 second
}

void moveServos(int pos1, int pos2, int pos3, int pos4, int pos5, int pos6) {
```

```
// Move each servo motor to the specified position
servo1.write(pos1);
servo2.write(pos2);
servo3.write(pos3);
servo4.write(pos4);
servo5.write(pos5);
servo6.write(pos6);
}
...
```

Here's how the code works:

1. The `Servo.h` library is included to provide the necessary functions for controlling the servo motors.
2. Six `Servo` objects are defined to represent the six servo motors.
3. The pins for each servo motor are defined using integer variables.
4. In the `setup()` function, the servo motors are attached to their respective pins using the `attach()` function.
5. In the `loop()` function:
  - The `moveServos()` function is called to move the servo motors to different positions.
  - The servo motors are moved to the positions specified by the function arguments (`pos1`, `pos2`, `pos3`, `pos4`, `pos5`, `pos6`).
  - The program waits for 1 second before moving the servo motors to the next set of positions.
6. The `moveServos()` function is defined to move each servo motor to the specified position using the `write()` function.

You can modify the positions passed to the `moveServos()` function to control the movement of the servo motors as desired. This code provides a basic example of how to move 6 servo motors using an Arduino-based system.