

# Week 3 Milestone

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Demonstrate your working serial API. At this point you should be able to read and write to Atmega32 IO ports using the rdIO and wrIO commands.

Begin the Servo API. You will begin planning the Servo API. The functions needed are the following:

```
Void initServoPort(void); // Set up the DDR for the servo port
Void initServo(void); // Set up ICR1, OCR1A, OCR1B, TCCR1A and TCCR1B
Void pan(int col); // Used to provide an absolute x-axis servo position. The number provided
// is to be a number between 0 and 176. This corresponds to the horizontal
// resolution of the camera. These values should cause a full range of travel
// from far left to far right.
Void tilt(int row); // Used to provide an absolute y-axis servo position. The number provided
// is to be a number between 0 and 144. This corresponds to the vertical
// resolution of the camera. These values should cause a full range of travel
// from top to bottom.
```

The following functions will be needed later by the tracking function. They allow the servo to be moved to a position *relative* to its current position.

```
Int getServoX(void);
Void setServoX(int xpos);
Int getServoY(void);
Void setServoY(int ypos);
```