

## Final Project Proposal: Three final project ideas

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### **First Idea:**

**Money Counter:** It has a slot to insert coins, and a detector to sense the coins. Uses stepper motors, IR Sensors and Optical sensors, for code we'll write code to read the sensor data, code to calculate the total value, and code to display the count.

### **Second Idea:**

**Toy or any object Claw Machine (small):** a claw mechanism with axis, and a release and pickup mechanism. Involves stepper motors for precise movement, and a servo motor for the claw. The code involves code to control direction, claw, and a timer for the machine.

### **Third Idea:**

**Paper Clip Sorter:** Sort paper clips based on size involving a surface with an incline or conveyor system for paper clips to roll down, and separate bins for sorting. We can use a DC Motor or Vibrating motor to make the paper clips go down the incline and roll into the bins for sorting. We can use basic code to control the motor and a sensor to detect when clips are rolling into the bins for sorting.