If reading > 490

If reading <482

else

If reading <115

If reading > 835

Make speed 0

Map speed to proper range

Map speed to proper range

Turn off motor

Set direction forward

Set direction backward

Store potentiometer reading

Stop program

Delay to allow for debounce

Send speed signal to motor

Compare reading with setpoint

and determine new speed

Initialize PID controller

Initialize pins

Include libraries

Define parameters