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// lift.hpp: Header file for utilities relating to the lift
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#ifdef LIFT_HPP
#define LIFT_HPP

#include "drive.hpp"

/** Contains everything relating to the drive */
namespace lift {
    /** Class for a side of the drive */
    struct side_t {
        /** Top motor on the the side */
        motor_t topM;
        /** Middle motor on the side */
        motor_t midM;
        /** Bottom motor on the side */
        motor_t lowM;
        /** Sets all motors on the side to the given power */
        void set(int power);
        /** A pointer to the sensor on the side */
        sensors::pot_t* sensor;
    }; // struct side_t

    /** Positions of the lift */
    typedef enum {
        bottom = 5,
        mobile = 60,
        one = 100,
        two = 230,
        three = 450,
    } position;

```

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extern double inch;
/** The left side of the lift */
extern side_t left;
/** The right side of the lift */
extern side_t right;
/** Sensor on the lift */
extern sensors::pot_t* sensor;
/** The value where the lift will stay up with a standard load */
static const char lockN = 17;
/** Any value below this point will result in the lift being set to 0 */
static const int threshold = 150;

/** Set the lift at their requested powers */
void set(int power);

/** Default value for the lift to be set at when it is no tin use */
void lock(void);

/** Initialize the drive subsystem */
void init(void);

/** p control for the lift */
void to(position pos = bottom, int int_pos = -1, int tolerance = 50);

/** Lift control that should be used in a while loop */
void control(void);

} // namespace lift

#endif /* end of include guard: LIFT_HPP */

```