```c
/**
 * @file autoStack.c
 * @brief Drive forward and stack cones from the loader
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 *
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 */

#include "../include/auto.h"

void updateLinesDrive();

void autonStack() {
	getMogo();
	delay(300);
	placeCone();

	turnTo(-6, 700);
	driveToPosition(1493, 1793, 1600);
	turnTo(-73, 1300);
	driveToPosition(drivePos(0) - 550, drivePos(1) - 150, 1200);
	liftToPosition(LIFT_QUARTER, 750);
	manipSettings.target = MANIP_HOVER;

	for (size_t i = 1; i < 6; i++) {
		delay(250);
		liftSettings.target = LIFT_LOAD;

		// 4bar out
		manipToPosition(MANIP_HOVER, 1200);
		manip.power = 10;

		// set intake to in
		intake.power = 127;
		update();
```

```
        // drop lift to match load height
        liftToPosition(LIFT_LOAD, 300 + 50 * i);

        // wait to pick up the cone, then set to a hold power
        delay(200);
        intake.power = 25;
        update();

        //Bring the lift up to the stacking height
        liftToPosition(i * LIFT_CONE, i * 250);
        liftSettings.target = LIFT_DOWN + i * LIFT_CONE;

        // 4bar to stacking position
        manipToPosition(MANIP_PLACE - i * 7, 1200 + i * 30);
        liftToPosition(LIFT_DOWN + i * LIFT_CONE, 250);
        update();

        delay(300);
        manip.power = -10;
        update();
        delay(150);

        // outtake
        intake.power = -127;
        update();
        delay(500);

        // lift back up a bit
        manipSettings.target = MANIP_HOVER;
        liftToPosition(LIFT_DOWN + 260 + i * LIFT_CONE, 250);
}

intake.power = 0;
resetDrive();
return;

// back up some
driveToPosition(-400, -400, 1000);
turnTo(-160, 3000); // turn around
// drive forward a bit
driveToPosition(drivePos(0) + 2350, drivePos(1) + 2000, 2600);

// raise the lift
liftSettings.target = LIFT_UP;
mogoP(MOGO_DOWN);
```

```
        driveSet(-127, -127);                   // Back up the drive
        delay(130);
        mogoP(MOGO_DOWN - 300);                 // Bring the mobile goal up a bit
        delay(250);
        driveSet(0, 0);                         // Stop the drive

        GO(mogoPT, MOGO_DOWN);
        turnTo(45, 2500);
        resetDrive();
        driveToPosition(1500, 1500, 2800);
        mogoP(MOGO_PART);

        turnTo(-135, 3400);
} /* autonLeftRed12 */
```