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/*
 * Title: motors.c
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 * Date: Apr. 8th, 2020
 * Lab: ENEL 387 Project
 */

#include "stm32f10x.h"
#include "motors.h"

void setMotionForward(void)
{
    uint32_t output = 0x00000000;

    output = (GPIOB->ODR & 0xFFFF0FFF); //mask odr to clear PB15-12
    output |= 0x0000C000;
    GPIOB->ODR = output;
}

void stopMotion(void)
{
    uint32_t output = 0x00000000;

    output = (GPIOB->ODR & 0xFFFF0FFF); //mask odr to clear PB15-12
    GPIOB->ODR = output;
}

void turnLeft(void)
{
    uint32_t output = 0x00000000;

    output = (GPIOB->ODR & 0xFFFF0FFF); //mask odr to clear PB15-12
    output |= 0x00006000;
    GPIOB->ODR = output;
}

void turnRight(void)
{
    uint32_t output = 0x00000000;

    output = (GPIOB->ODR & 0xFFFF0FFF); //mask odr to clear PB15-12
    output |= 0x00009000;
    GPIOB->ODR = output;
}

```