```c
/*
 * parallel_in_parallel_out_flat.c
 *
 * Created: 2/18/2021 6:12:01 PM
 * Author : hp
 */

#include <avr/io.h>

#define PORTA_INPUT_CONFIGURATION_gc 0x03
#define PORTC_INPUT_CONFIGURATON_gc 0xFC
#define PORTD_OUTPUT_CONFIGURATION_gc 0xFF

int main(void)
{

    PORTA_DIR &= PORTA_INPUT_CONFIGURATION_gc;
    PORTC_DIR &= PORTC_INPUT_CONFIGURATON_gc;
    PORTD_DIR |= PORTD_OUTPUT_CONFIGURATION_gc;

    uint8_t* ctrl_ptr = (uint8_t*)&PORTA_PIN2CTRL;

    for (uint8_t i = 0; i < 6; ++i) {
        *(ctrl_ptr + i) |= PORT_PULLUPEN_bm;
    }

    PORTC_PIN0CTRL |= PORT_PULLUPEN_bm;
    PORTC_PIN1CTRL |= PORT_PULLUPEN_bm;

    while (1)
    {
        PORTD_OUT = (PORTA_IN | PORTA_INPUT_CONFIGURATION_gc) | (PORTC_IN |
            PORTC_INPUT_CONFIGURATON_gc);
    }
}
```