Flowchart 1 (left)

START

PORT Initializations

While → SI → Lectura de la fila de datos (f.e. 123A)

If (tecla 1 presionada) → SI → Shift nibbles OR mask of 1 Delay

NO

else if (tecla 2 presionada) → SI → Shift nibbles OR mask of 2 Delay

NO

else if (tecla 3 presionada) → SI → Shift nibbles OR mask of 3 Delay

NO → Shift nibbles OR mask of A Delay

Next data row and repeat process with data of the next row

END

Flowchart 2 (middle)

START

Libraries/Headers
#include
"config_header.h"

Directives Section
#define_XTAL_FREQ16000000

Data types section
_interrup (high_priority) void high_isr (void){
Nop();//Function to consume one Instruction Cycle}
//ISR for low priority
_interrupt(low_priority)void low_isr (void){
Nop();//Function to consume one Instruction Cycle

Function declaration
void delay (void);
void portsinit (void)

Main section:
void main (void){
portsInit();
//INFINITE CYCLE while (1){
}
}

End

Box (right)

Functions declaration
void delay (void){
for (int i=0; i10; i++)
_delay_ms (10);
}
void portsInit (void){
ANSELB= 0;
TRISB=0b11110000;
WPUB=0b11110000;
INTCONbits.RBPU=0;
ANSELD=0;
TRISD=0;
LATD=;
}