KEYBOARD

PIN_BTN_START := 2
PIN_BTN_END := 5
PIN_BTN_SHIFT := 6
PIN_SPEAKER := 7

KEYBOARD_LENGHT := PIN_BTN_END +1 **- PIN_BTN_START**
FREQUENCIES := { 262, 294, 330, 349, 392, 440, 494, 532 }
KEYB_PREV_STATE := { 0, 0, 0, 0 }
KEYB_STATE := KEYB_PREV_STATE
SHIFT_STATE := LOW

for i ← **PIN_BTN_START** to **PIN_BTN_END**

> set pin i as INPUT

set pin **PIN_BTN_SHIFT** as INPUT
set pin **PIN_SPEAKER** as OUTPUT

SHIFT_STATE := read pin **PIN_BTN_SHIFT**

for i ← **PIN_BTN_START** to **PIN_BTN_END**

> **KEYB_STATE**[i] **=** read pin i

for i ← 0 to **KEYBOARD_LENGHT**

KEYB_STATE[i] <> **KEYB_PREV_STATE**[i]	
V	F

KEYB_STATE[i] **=** HIGH		turn off **PIN_SPEAKER**
V	F	ø

SHIFT_STATE == LOW	
V	F
FREQ **:= FREQUENCIES**[i]	FREQ **:= FREQUENCIES**[i **+** KEYBOARD_LENGTH**]**

square wave to **PIN_SPEAKER** with freq FREQ

KEYB_PREV_STATE := KEYB_STATE

wait 175ms